

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 4, 2022

Mary Beth Endres Regulatory Manager Axion AG Products, LLC. 1880 Fall River Drive, Suite 100 Loveland, CO 80538

Subject: Notification per PRN 98-10 – Delete Inadvertently Text on Pages 3

and 28 and Correct Active Ingredient Name in the Tank mix Section on Page 45

of the Previous Approved Label Product Name: AX FLUMIOX EPA Registration Number: 89167-45 Application Date: March 29, 2022

Decision Number: 583365

# Dear Ms. Endres:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements 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 Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, you may contact please contact Ernest Kraka at 202-566-2811 or by email at <a href="mailto:kraka.ernest@epa.gov">kraka.ernest@epa.gov</a>.

Page 2 of 2 EPA Reg. No. 89167-45 Decision No. 583365

Sincerely,

Shaja B. Joyner, Product Manager 20

Fungicide-Herbicide Branch Registration Division 7505P

# NOTIFICATION

89167-45

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

06/04/2022

FLUMIOXAZIN GROUP 14 HERBICIDE

Note: **Bold italicized text** is information for the reader and is not part of the label. [Bracketed information is optional text].

# **AX-FLUMIOX**

#### **HERBICIDE**

FOR CONTROL AND/OR SUPPRESSION OF CERTAIN WEEDS IN (ALFALFA), (ARTICHOKE) (ASPARAGUS), (BUSHBERRIES), (CABBAGE AND CHINESE CABBAGE (TIGHT HEADED VARIETIES ONLY)[\*]), (CACTUS (PRICKLY PEAR)[\*]) (CELERY), (CHICKPEA), (COTTON), (CUCURBIT VEGETABLES[\*]), (DRY BEANS), (FIELD CORN), (FIELD PEA[\*]), (FLAX[\*]), (FRUITING VEGETABLES (INCLUDING OKRA)[\*]), (GARLIC), (GRAPE), (HOPS[\*]), (LENTILS[\*]), (MINT), (NUT TREES (INCLUDING PISTACHIO)), (ONION (DRY BULB) [\*]), (OLIVE), (PEANUT[\*]), (POME FRUIT), (POMEGRANATE), (POTATO), (SOYBEAN[\*]), (STONE FRUIT), (STRAWBERRY), (SUGARCANE[\*]), (SUNFLOWER[\*] AND SAFFLOWER[\*]), (SWEET POTATO), (WHEAT[\*]) (TRANSPLANTED MELONS, PEPPER AND TOMATO BEDS) (NON-BEARING FRUIT TREES), (FALLOW LAND) AND TO MAINTAIN BARE GROUND ON NON-CROP AREAS OF (FARMS), (ORCHARDS) AND (VINEYARDS).

 ACTIVE INGREDIENT:
 % BY WT.

 FLUMIOXAZIN\*
 51%

 OTHER INGREDIENTS:
 49%

 TOTAL:
 100%

# 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 ADDITIONAL PRECAUTIONARY STATEMENTS.]
[See inside booklet for additional Precautionary Statements and Directions for Use.]
[See inside label booklet for First Aid, Precautionary Statements and Directions for Use.]

EPA Reg. No.: 89167-45	EPA Est. No.:

NET CONTENTS: \_\_\_\_ [Lbs.]

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

032922

<sup>\*2-[7-</sup>fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1*H*-isoindole- 1,3(2H)-dione AX-FLUMIOX is a water dispersible granule containing 51% active ingredient.

# **{LANGUAGE INSIDE BOOKLET}**

FIRST AID				
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>			
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to do so by the poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person</li> </ul>			
HOTLINE NUMBER				

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: www.npic.orst.edu). For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC 800-424-9300.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing dust and spray mist. Avoid contact with skin, eyes or clothing.

# PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some of the materials that are chemical-resistant to this product are listed below.

# Applicators and other handlers must wear:

- long-sleeved shirt and long pants,
- chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils. neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, Viton ≥14 mils
- shoes and socks.

# For aerial application to sugarcane, mixer/loaders must also wear:

- coveralls,
- chemical resistant apron and
- · chemical resistant boots.

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

# **USER SAFETY RECOMMENDATIONS**

# **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

# **ENVIRONMENTAL HAZARDS**

This product is toxic to non-target plants and aquatic invertebrates. **DO NOT** apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. **DO NOT** apply where runoff is likely to occur. **DO NOT** apply when weather conditions favor drift from treated areas. **DO NOT** contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and must be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

Under some conditions this product may have a potential to run-off to surface water or adjacent land.

Where possible, use methods which reduce soil erosion, such as no till, limited till and contour plowing; these methods also reduce pesticide run-off. Use vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run-off could occur to minimize water run-off.

# **Non-Target Organism Advisory**

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.

Note to EPA reviewer: If this product is shipped in containers greater than 50 lbs, the following environmental hazard statement will be added to the label:

[**DO NOT** discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. **DO NOT** discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.]

# **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label. Use strictly in accordance with precautionary statements and directions, and with applicable state and federal regulations.

**DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific 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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, Viton ≥14 mils, shoes plus socks.

# NON-AGRICULTURAL USE REQUIREMENTS

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

Keep all unprotected persons out of operating areas, or vicinity where there may be drift. **DO NOT** enter or allow others to enter treated areas until sprays have dried.

# **TANK MIXES**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor to the extent allowed by applicable law.

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.

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#### **USE INFORMATION**

#### AX-FLUMIOX uses:

- AX-FLUMIOX provides residual control of susceptible weeds in alfalfa, asparagus, bushberries, celery, cotton, cucurbit vegetables[\*], dry bean, field corn, garlic, grape, hops[\*], mint, nut trees (including pistachio), onion (dry bulb)[\*], non-bearing fruit trees, peanut[\*], pome fruit, potato, soybean[\*], stone fruit, strawberry, sugarcane[\*] and sweet potato.
- AX-FLUMIOX provides additional burndown activity when used as part of a burndown program in alfalfa, asparagus, celery, cotton, cucurbit vegetables[\*], dry bean, field corn, fruiting vegetables (including okra)[\*] row middles, grape, hops[\*], nut trees (including pistachio), non-bearing fruit trees, peanut, soybean and sugarcane[\*].
- AX-FLUMIOX can be applied as part of a fall burndown program for control of susceptible winter annuals.
- AX-FLUMIOX can be applied with a hooded or shielded sprayer, as well as part of a layby application, in cotton and sugarcane[\*] for postemergence weed control as well as residual control of susceptible weeds.
- AX-FLUMIOX can be used on farms, orchards and vineyards for non-selective vegetation control to maintain bare ground non-crop areas that must be kept weed free.
- AX-FLUMIOX, when applied according to label use directions, will control the weeds claimed in crop specific use directions. This label makes no claims concerning control of other weed species.
- 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.

[\*Not for Use in California]

# 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 is responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they must be observed.

# **Precautions**

- When applying by air, observe drift management restrictions and precautions listed under "AERIAL APPLICATION".
- Mechanical incorporation into the soil will reduce residual weed control.
- Only apply Post directed and layby applications of AX-FLUMIOX to healthy growing crops.

#### Restrictions

- DO NOT apply this product when weather conditions favor spray drift from treated areas.
- DO NOT apply during low-level inversion conditions, including fog.
- DO NOT apply to frozen or snow covered soil.

- DO NOT apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.
- **DO NOT** apply within 300 yards of non-dormant pears.
- **DO NOT** apply to powdery soils or soils that are susceptible to wind displacement unless irrigation can be applied immediately after application.

Spray equipment used to apply AX-FLUMIOX must not be used to apply other materials to any crop foliage, unless the proper cleanout procedures are followed. See "SPRAYER CLEANUP" for more information.

# **ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE**

# **Preemergence Application (Conventional Tillage)**

**Important:** Crop injury may occur from applications made to poorly drained soils and/or applications made under cool, wet conditions. Risk of crop injury can be minimized by using on well drained soils, planting at least 1.5 inches deep, using high quality seed and completely covering seeds with soil prior to preemergence applications. Treated soil that is splashed onto newly emerged crops may result in temporary crop injury.

Moisture is necessary to activate AX-FLUMIOX in soil for residual weed control. Dry weather following applications of AX-FLUMIOX may reduce effectiveness. However, when adequate moisture is received after dry conditions, AX-FLUMIOX will control susceptible germinating weeds. AX-FLUMIOX may not control weeds that germinate after application but before an activating rainfall/irrigation or weeds that germinate through cracks resulting from dry soil.

When adequate moisture is not received after a AX-FLUMIOX application, weed control may be improved by irrigation with at least 1/4 inch of water. If emerged weeds are controlled by cultivation, residual weed control will be reduced.

# **Burndown Application**

For best results, apply AX-FLUMIOX as part of a burndown program to actively growing weeds. Applying AX-FLUMIOX under conditions that do not promote active weed growth will reduce herbicide effectiveness. **DO NOT** apply AX-FLUMIOX when weeds are under stress due to drought, excessive water, extremes in temperature, disease or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. AX-FLUMIOX is most effective when applied under warm sunny conditions.

Reduced residual weed control may occur when burndown applications are made to fields where heavy crop and/or weed residue exist.

# Postemergence Application

Apply AX-FLUMIOX to healthy crops labeled for postemergence use. **DO NOT** apply AX-FLUMIOX to crops that have been weakened by disease, drought, flooding, excessive fertilization, soil salts, previously applied pesticides, nematodes, insects or winter injury.

# Rainfastness

AX-FLUMIOX is rainfast one hour after application. Applications made when rain is expected within one hour of application will reduce postemergence efficacy.

#### **Soil Characteristics**

Application of AX-FLUMIOX to soils with high organic matter and/or high clay content may require higher dosages than soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

# **HERBICIDE RATE**

Residual Weed Control (Including Preemergence Applications or Applications as Part of a Fall or Spring Burndown and Fallow Seedbed Program)

Based upon soil characteristics (organic matter content and texture), the most difficult to control weed species being targeted, and the crop being grown, select the proper AX-FLUMIOX dosage from the rate range tables contained in this label.

**CARRIER VOLUME AND SPRAY PRESSURE** (Ground Equipment only. See Information for Aerial Equipment under "AERIAL APPLICATION".)

# **Preemergence Application (Conventional Tillage)**

To ensure uniform coverage, use 10 to 30 gallons of spray solution per acre for conventional tillage applications. Nozzle selection must meet manufacturer's gallonage and pressure specifications for preemergence herbicide application.

# **Burndown Application (Prior to Crop Emergence)**

To ensure thorough coverage in burndown applications, use 15 to 60 gallons spray solution per acre. Use 20 to 60 gallons per acre if dense vegetation or heavy crop residue is present. Nozzle selection must meet manufacturer's gallonage and pressure specifications for postemergence herbicide application. **DO NOT** use flood jet nozzles.

**Postemergence Application (Emerged Crop)** Check use directions for specific crops in which AX-FLUMIOX can be applied postemergence. To ensure thorough coverage in burndown applications, use a minimum of 15 gallons spray solution per acre. Use a minimum of 20 gallons per acre if dense vegetation or heavy crop residue is present. Nozzle selection must meet manufacturer's gallonage and pressure specifications for postemergence herbicide application.

#### **ADDITIVES**

# **Burndown Application (Prior to Crop Emergence)**

Postemergence control of weeds from AX-FLUMIOX tank mixes will require the addition of an agronomically approved adjuvant to the spray mixture. When an adjuvant is to be used with AX-FLUMIOX, Axion Ag Products, LLC recommends the use of a Chemical Producers and Distributors Association certified adjuvant. Either a crop oil concentrate or methylated seed oil which contains at least 15% emulsifiers and 80% oil or a non-ionic surfactant at 0.25% v/v, may be used when applying AX-FLUMIOX as part of a burndown program. Some tank mix partners, including glyphosate, are formulated with sufficient adjuvants and do not require the addition of a crop oil concentrate, methylated seed oil or non-ionic surfactant when tank mixed with AX-FLUMIOX. The addition of a crop oil concentrate or methylated seed oil may increase the burndown activity on certain weeds including cutleaf eveningprimrose and Carolina geranium. Verify mixing compatibility qualities with a jar test.

A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or a 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to the spray mixture along with either a crop oil concentrate, methylated seed oil or non-ionic surfactant to enhance weed control. The addition of a nitrogen source does not replace the need for a crop oil concentrate, a methylated seed oil or a non-ionic surfactant.

# **Adjuvants and Drift Control Additives**

Refer to tank mix partner's label for adjuvant use directions. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

#### JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND AX-FLUMIOX

When using AX-FLUMIOX and an adjuvant, including in stale seed bed, layby, hooded/shielded or reduced tillage situations, perform a jar test before mixing commercial quantities of AX-FLUMIOX, when using AX-FLUMIOX for the first time, when using new adjuvants or when a new water source is being used.

- 1. Add 1 pint of the water to a quart jar. Use water from the same source and temperature as which will be used in the spray tank mixing operation.
- 2. Add 1 g of AX-FLUMIOX to the quart jar for every 3 ounces of AX-FLUMIOX per acre being applied (4 g if 12 ounces per acre is the desired AX-FLUMIOX rate), gently mix until product goes into suspension.

- 3. Add 60 ml (4 Tbsps. or 2 fluid ounces of the crop oil or methylated seed oil to the quart jar or 1 ml of non- ionic surfactant if it is being used in place of oil, gently mix.
- 4. If nitrogen is being used, add 16 ml (1 Tbsp. or 0.5 ounce.) of the 28 to 32% nitrogen source to the quart jar. If ammonium sulfate is being used, add 19 g AMS to the quart jar in place of the 28 to 32% nitrogen.
- 5. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.
- 6. An ideal tank mix combination will be uniform and free of suspended particles. The appearance of any of the following conditions are unacceptable and the choice of adjuvant must be modified:
  - a) Layer of oil or globules on the mixture's surface.
  - b) Flocculation: fine particles in suspension or as a layer on the bottom of the jar.
  - c) Clabbering: Thickening texture (coagulated) like gelatin.

#### SPRAYER PREPARATION

Before applying AX-FLUMIOX, start with clean, well maintained application equipment. The spray tank, as well as all hoses and booms, must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. Some pesticides, including but not limited to, the sulfonylurea and phenoxy herbicides, are active at very small amounts and can cause crop injury when applied to susceptible crops. The spray equipment must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply AX-FLUMIOX. If two or more products were tank mixed prior to AX-FLUMIOX application, the most restrictive cleanup procedure must be followed.

# **MIXING INSTRUCTIONS**

- 1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
- 2. If a drift retardant is to be used, add 10 pounds of spray grade ammonium sulfate per 100 gallons of spray solution.
- 3. To ensure a uniform spray mixture, pre-slurry the required amount of AX-FLUMIOX with water prior to addition to the spray tank. Use a minimum of 1 gallon of water per 10 ounces of AX-FLUMIOX.
- 4. While agitating, slowly add the pre-slurried AX-FLUMIOX to the spray tank. Adequate agitation will create a rippling or rolling action on the water surface.
- 5. If tank mixing AX-FLUMIOX with other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. Prepare no more spray mixture than is required for the immediate spray operation.
- 6. Add any required adjuvants.
- 7. Fill spray tank to desired level with water. Continue agitation until all spray solution has been applied.
- 8. Mix only the amount of spray solution that can be applied the day of mixing. Apply AX-FLUMIOX within 6 hours of mixing.

#### SPRAYER CLEANUP

Spray equipment, including mixing vessels and nurse tanks, must be cleaned each day following AX-FLUMIOX application. After AX-FLUMIOX is applied, the following steps must be used to clean the spray equipment:

- 1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
- 2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
- 3. Top off tank, add 1 gal of 3% household ammonia (or equivalent) for every 100 gallons of water, circulate through sprayer for 5 minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If diaphragms are being used on the spray boom, loosen diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm. If spray lines have any end caps, they must be loosened before flushing the system, allowing cleaning solution to spray through the loosened caps. To enhance removal of AX-FLUMIOX from the spray system, add a tank cleaner in place of ammonia and allow the cleaning solution to remain in the pressurized spray system (spray tank, hoses and boom) overnight before flushing the system for a minimum of 15 minutes.
- 4. Drain tank completely.

- 5. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.
- 6. Remove all nozzles and screens and rinse them in clean water.

Spray equipment, including all tanks, hoses, booms, screens and nozzles, must be thoroughly cleaned before it is used to apply postemergence pesticides. Equipment with AX-FLUMIOX residue remaining in the system may result in crop injury to the subsequently treated crop.

#### APPLICATION EQUIPMENT

Application equipment must be clean and in good repair. Nozzles must be uniformly spaced on boom and frequently checked for accuracy.

# **BROADCAST APPLICATION**

Apply AX-FLUMIOX, and AX-FLUMIOX tank mixes, with ground equipment using standard commercial sprayers equipped with flat fan or flood nozzles (preemergence applications only) designed to deliver the desired spray pressure and spray volume.

#### **BAND APPLICATION**

When banding, use proportionately less water and AX-FLUMIOX per acre. The rate of AX-FLUMIOX required per acre, when applied as a banded application, can be calculated with the following formula:

Amount needed per Acre	_	Band Width in Inches	V	Data per President Aero
for Banded Application	_	Row Width in Inches	_ ^	Rate per Broadcast Acre

#### MANDATORY SPRAY DRIFT

# **Aerial Applications**

- **DO NOT** release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must select nozzle and pressure that deliver medium or coarser droplets in accordance with the American Society of Agriculture & Biological Engineers Standard 641 (ASABE S641).
- If the windspeed is 10 mph or less, applicators must use 1/2 swath displacement upwind at the downwind edge of the field. When the windspeed is between 11 to 15 mph, applicators must use 3/4 swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the windspan for fixed wing aircraft and 75% or less 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.
- **DO NOT** apply during temperature inversions.
- DO NOT apply this product by air within 40 feet of non-target plants including non-target crops.
- **DO NOT** apply this product by air within 100 feet of emerged cotton crops.
- **DO NOT** apply this product by air within 40 feet of streams, wetlands, marshes, ponds, lakes and reservoirs

# **Ground Boom Applications**

- User must only apply with the release height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- Applicators must select nozzle and pressure that delivery medium or coarser droplets in accordance with the American Society of Agriculture & Biological Engineers Standard 572 (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

# **Boomless Ground Applications**

- Applicators must select nozzle and pressure that delivery medium or coarser droplets in accordance with the American Society of Agriculture & Biological Engineers Standard 572 (ASABE S572).
- DO NOT apply when wind speeds exceed 15 miles per hour 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 spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

# **Controlling Droplet Size - Ground Boom**

- **Volume** Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** Use the lowest spray pressure 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**

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, use larger droplets to reduce effects of evaporation.

# **TEMPERATURE INVERSIONS**

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

# WIND

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

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

# **RESISTANCE MANAGEMENT**

For resistance management, this product is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 14 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 14 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 including 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 resistancemanagement 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 844-425-8488.

# **Management of Resistant 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 this Mode of Actions have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of actions for each target weed.

# **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.

#### **CHEMIGATION**

Follow all label directions for crops regarding rates, timing of application, special instructions and precautions.

Apply this product only through center pivot systems. End guns must be turned off due to uneven application. **DO NOT** apply this product through any other type of irrigation system.

Crop injury, lack of efficacy or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

The system must be properly calibrated (with water only) to ensure that the amount of AX-FLUMIOX applied corresponds to the listed rate.

Apply AX-FLUMIOX in 1/2 to 3/4 inches of water during the first sprinkler set. Allow time for all lines to flush the herbicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining herbicide, a dye indicator may be injected into the lines to mark the end of the application period. Once chemigation has begun, the run must be completed to ensure no product is left in the system.

If you have any questions about calibration, you should contact your State Extension Service Specialist, equipment manufacturers or other experts.

# **Special Instructions for Chemigation**

- 1. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 2. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person must be present to shut the system down and make necessary adjustments.
- 3. The system must be free of leaks and clogged nozzles.
- 4. The pesticide must be supplied continuously for the duration of the aqueous application. An uneven application may cause injury to the crop or poor weed control.
- 5. Agitation must be maintained in the nurse tank.
- 6. 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.
- 7. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- 8. The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in the case where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 11. Systems must use a metering pump, including a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with the pesticides and capable of being fitted with a system interlock.
- 12. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

# **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 a 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 the public water system must contain a functional, reduced pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall

- be a complete physical break (air gap) between the outlet end of the fill pipe and the top overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. All chemigation systems connected to the public water system must also follow restrictions listed in the preceding section titled **"Special Instructions for Chemigation".**

#### APPLICATION WITH DRY BULK FERTILIZERS

Dry bulk fertilizer may be impregnated or coated with AX-FLUMIOX. Application of dry bulk fertilizer with AX-FLUMIOX provides weed control equal to, or slightly below, the same rate of AX-FLUMIOX applied in liquid carriers, due to better coverage with application via spray equipment. Follow label directions for AX-FLUMIOX regarding rates, special instructions, cautions and special precautions. Apply 400 to 700 lbs. of the fertilizer/herbicide mixture per acre to obtain adequate soil coverage. Apply the mixture to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop injury and to obtain uniform weed control.

**DO NOT** us ammonium nitrate and/or limestone as the sole source of fertilizer, as the AX-FLUMIOX may not adhere to these materials.

Compliance with all Federal and State regulations relating to blending pesticide mixtures with dry bulk fertilizer, registrations, labeling and application are the responsibility of the individual and/or company offering the fertilizer and AX-FLUMIOX mixture for sale.

AX-FLUMIOX must be premixed with water to form a slurry prior to impregnation on dry bulk fertilizer. Use a minimum of 1 pint of water for each 2 ounces of AX-FLUMIOX, and use a minimum of 6 pints of the AX-FLUMIOX slurry to impregnate 2000 lbs. of the fertilizer for uniform coverage of the fertilizer. Closed drum, belt, ribbon or other commonly used dry bulk blenders may be used.

The amount of AX-FLUMIOX required can be calculated with the following formula:

Thoroughly clean dry fertilizer blending equipment after AX-FLUMIOX has been placed in the system to avoid injury to sensitive crops that may be treated with fertilizers blended after the equipment has been used for AX-FLUMIOX. Rinse the sides of the blender and the herbicide tank with water. Then impregnate the rinsate onto a load of dry fertilizer intended for an approved crop. Use a maximum rate of 1 gal. of rinsate per ton of fertilizer. Follow with 1 to 2 loads of unimpregnated fertilizer in the blender before switching herbicides.

# **ROTATIONAL RESTRICTIONS**

The following rotational crops may be planted after applying AX-FLUMIOX at the listed rate. Planting earlier than the specified rotational interval may result in crop injury.

• DO NOT plant any crop, except corn (field), cotton, peanut, soybean, sugarcane and sweet potato earlier than 30 days after applying AX-FLUMIOX.

AX-FLUMIOX RATES	CROPS	ROTATIONAL INTERVALS
1 oz/A	Cotton (no-till or strip-till only)	14 days <sup>1</sup>
1.5 to 2 oz/A	Cotton (no-till or strip-till only)	21 days <sup>1</sup>
2 oz/A or less	Peanut, Soybean, Sugarcane and Sweet Potato	immediately
	Field Corn (minimum and no-till)	7 days
	Cotton and Field Corn (conventional tillage), Rice, Sorghum, Sunflower, Tobacco and Wheat	30 days¹

	Barley, Dry and Snap Beans, Flax, Peas, Rye, Safflower and Sweet Corn	3 months	
	Alfalfa, Canola, Clover, Oats, Potato, Sugar Beet and all other crops not listed <sup>2</sup>	4 months if soil is tilled prior to planting 8 months if no tillage is performed	
	Lentil	6 months	
Up to 3 oz/A	Peanut, Soybean, Sugarcane and Sweet Potato	immediately	
	Field Corn (minimum and no-till)	14 days	
	Field Corn (conventional tillage) and Sorghum	30 days¹	
	Cotton, Rice, Sunflower, Tobacco and Wheat	2 months <sup>1</sup>	
	Barley, Dry and Snap Beans, Flax, Pea, Rye, Safflower and Sweet Corn	4 months	
	Alfalfa, Clover, Oats, Potato, Sugar Beet	5 months if soil is tilled prior to planting 10 months if no tillage is performed	
	Canola and all other crops not listed <sup>2</sup>	6 months if soil is tilled prior to planting 12 months if no tillage is performed	
	Lentil	7 months	
Up to 4 oz/A	Sugarcane	Immediately	
	Alfalfa, Canola, Potato, Sugar Beet and all other crops not listed <sup>2</sup>	6 months if soil is tilled prior to planting 12 months if no tillage is performed	
	Cotton, Field Corn, Peanut, Rice, Sorghum, Soybean, Sunflower, Tobacco and Wheat	4 months	
	Transplanted on raised beds only: melon, pepper and tomato <sup>3</sup>	2 months (if the top 4 inches of the beds have been removed)	
6 to 12 oz/A	Cotton, Field Corn, Peanut, Rice, Sorghum, Soybean, Sunflower, Tobacco and Wheat	9 months	
	Alfalfa, Canola, Sugar Beet and all other crops not listed <sup>2</sup> Trees can be transplanted 2 months after an application of AX-FLUMIOX <sup>3</sup>	12 months if soil is tilled prior to planting 18 months if no tillage is performed	

<sup>1</sup> At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.

# Table 1. Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX

#### **BROADLEAF WEED SPECIES** SECTION A **AX-FLUMIOX** ORGANIC **SOIL TYPE COMMON NAME SCIENTIFIC NAME MATTER RATE** Up to 5% All Soil Types Carpetweed Mollugo verticillata 2 oz/A Chickweeds Common Stellaria media Mouseear Cerastium vulgatum Dandelion Taraxacum officinale Eclipta Eclipta prostrata Eveningprimrose, Oenothera laciniata Cutleaf Field Pennycress[\*] Thlaspi arvense Florida Pusley Richardia scabra Henbit Lamium amplexicaule

<sup>2</sup> Successful soil bioassay must be performed prior to planting these crops.

<sup>3</sup> Transplanted apple, apricot, avocado, bushberries (including blueberry), cherry, fig, grape, grapefruit, lemon, nectarine, nut trees (including pistachio), olive, orange, peach, pear, plum (including dried plum), and tangerine can be planted 2 months after a AX-FLUMIOX application of 2 to 12 ounces per acre.

Lambsquarters,	Chenopodium album
Common Little Mallow	Malya panyiflara
Marestail/Horseweed	Malva parviflora
	Conyza canadensis  Matricaria maritime
Mayweed/False Chamomile	Matricaria mantime
Nightshades	
Black	Solonum nigrum
Eastern Black	Solanum nigrum Solanum ptycanthum
Hairy	Solanum sarrachoides
Pigweeds	Solarium Sarracholdes
Redroot	Amaranthus retroflexus
Smooth	Amaranthus hybridus
Spiny Amaranth	Amaranthus spinosus
Tumble	Amaranthus albus
Prickly Lettuce	Lactuca serriola
Prickly Sida	Sida spinosa
(Teaweed)	
Puncturevine	Tribulus terrestris
Purslane, Common	Portulaca oleracea
Radish, Wild	Raphanus raphanistrum
Redmaids	Calandrinia ciliata var
	menziessii
Shepherd's-purse	Capsella bursa-pastoris
Smallflower	Jacquemontia tamnifolia
Morningglory	
Sowthistle, Prickly[*]	Sonchus asper
Spotted Spurge	Euphorbia maculata
Venice Mallow	Hibiscus trionum
[*Not for use in Californ	nia.]

Table 1. Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX (continued)

Section B				
All weeds listed in So	ection A plus:			
COMMON NAME	SCIENTIFIC NAME	ORGANIC SOIL TYPE		AX-FLUMIOX RATE <sup>2</sup>
Coffee Senna	Cassia occidentalis			2 oz/A Cotton and
Common Ragweed <sup>1</sup>	Ambrosia artemisiifolia			Dry Bean
False Chamomile[*]	Tripleurospermum maritima			2.5 oz/A Field Corn
Florida Beggarweed	Desmodium tortuosum	Up to 3%	All Soil Types	and Soybean[*]
Golden Crownbeard	Verbesina encelioides			3 oz/A Peanut[*]
Hairy Indigo	Indigofera hirsuta			and all other labeled crops
Hemp Sesbania	Sesbania exaltata			
Jimsonweed	Datura stramonium			
Kochia	Kochia scoparia		Coarse and	0 10 0 11
London Rocket[*]	Sisymbrium irio		Medium Soils:	2 oz/A Cotton and Dry Bean 2.5 oz/A Field Corn and Soybean[*] 3 oz/A Peanut[*] and all other labeled crops
Morningglories <sup>3</sup>			(sandy loam,	
Entireleaf	Ipomoea hederacea var. integriuscula		loamy sand, loamy, siltloam,	
lvyleaf	Ipomoea hederacea		silt, sandy clay, sandy clay loam)	
Red/Scarlet	Ipomoea coccinea	3 to 5%		
Tall	Ipomoea purpurea			
Mustard, Wild	Brassica kaber			
Palmer Amaranth	Amaranthus palmeri			
Spurred Anoda	Anoda cristata	Fine Soils:		
Tropic Croton	opic Croton Croton glandulosus		(silty clay, silty	2 oz/A Cotton and
Waterhemps <sup>1</sup>		clay		Dry Bean
Common	Amaranthus rudis		loam, clay, clay	3 oz/A Field Corn,
Tall	Amaranthus tuberculatus		loam)	

Wild Poinsettia	Euphorbia heterophylla		Peanut[*],
Yellow Rocket[*]	Barbarea vulgaris		Soybean[*] and all
Tollow Trooked 1	Bankaroa vargano		other labeled crops

- 1 A postemergence herbicide, including lactofen or glyphosate (Roundup Ready or glyphosate resistant soybeans only), may be needed following a preemergence application of AX-FLUMIOX to adequately control common ragweed or waterhemp in soybean fields with heavy pressure.
- 2 Due to differences in crop canopy timing between peanuts and soybeans, apply 3 ounces per acre of this product in peanuts, regardless of soil type and organic matter content, except in the states of North Carolina, Oklahoma and Virginia where a maximum of 2 ounces per acre can be applied in peanuts. AX-FLUMIOX will provide residual control of these weeds at 2 ounces per acre when applied under a cotton canopy.
- 3 Morningglory species are not adequately controlled on fine soils or soils with greater than 3% organic matter.

\* Not for use in California

Table 2. Weeds Suppressed by Residual Activity of AX-FLUMIOX

<b>BROADLEAF WEED SP</b>	ECIES				
COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	OUNCES PER ACRE		
Bristly Starbur	Acanthospermum hispidum	Up to 5%	2 to 3		
Copperleaf, Hophornbeam	Acalypha ostryifolia				
Ragweed, Giant	Ambrosia trifida				
Russian Thistle	Salsola iberica				
Smartweeds					
Ladysthumb	Polygonum persicaria				
Pennsylvania	Polygonum pensylvanicum				
Smellmelon[*]	Cucumis melo				
Velvetleaf	Abutilon theophrasti				
Wild Buckwheat	Polygonum convolvulus				
Wormwood, Biennial	Artemisia biennis				
GRASS WEED SPECIES					
Barnyardgrass	Echinochloa crus-galli				
Bluegrass, Annual	Poa annua				
Crabgrass, Large	Digitaria sanguinalis				
Foxtail, Giant	Setaria faberi				
Goosegrass	Eleusine indica				
Lovegrass, California	Eragrostis diffusa				
Panicums					
Fall	Panicum dichotomiflorum				
Texas	Panicum texanum				
Ryegrass, Italian[*]	Lolium multiflorum				
Signalgrass, Broadleaf	Brachiaria platyphylla				
Cheat	Bromus secalinus	Up to 5%	1.5 to 3		
Downy Brome[*]	Bromus tectorum	<u> </u>			
[*Not for use in California]	·				

# DIRECTIONS FOR USE IN FALL AND SPRING PREPLANT BURNDOWN AND FALLOW SEEDBED PROGRAMS IN FIELD CORN, PEANUT[\*] AND SOYBEAN[\*] (Preemergence to Crop)

[For Use in [Arizona], [California] [and] [Hawaii] Only] [\*Not for Use on Peanut or Soybean in California]

# **RESTRICTIONS**

- **DO NOT** apply AX-FLUMIOX to frozen or snow covered soil.
- DO NOT perform any tillage operation after application or residual weed control will be reduced.
- [Observe all rotational intervals prior to planting as listed in the "ROTATIONAL RESTRICTIONS" table.]

# **FALL BURNDOWN AND FALLOW SEEDBED PROGRAMS**

AX-FLUMIOX [, at 2 to 4 ounces per acre] can be used in the fall to provide residual weed control in fields that will be planted the following spring with field corn, peanut or soybean [(refer to Rotational Restrictions table for rates and rotational intervals prior to planting)]. Weeds controlled by residual activity are listed in Table 1 (sections A and B), Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX; Table 3, Weeds Controlled by Fall and Spring Preplant Burndown Programs; and Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX. If weeds have emerged at the time of application, use AX-FLUMIOX in combination with a labeled burndown herbicide. [Application must be made no earlier than October 15 in Region 2 or November 15 in Region 1 or when soil temperature falls below 50°F at a 2 inch depth to maintain residual weed control into the spring (April 1 in Region 1 and May 1 in Region 2) or up until planting, whichever comes first.] AX-FLUMIOX can be used in a fall burndown or fallow seedbed program [outside of Regions 1 and 2], however the length of residual control may be variable.

Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

# [Fall Application Regions:

Region 1: Alabama, Arkansas, Georgia, Kentucky, Mississippi, Oklahoma, Tennessee and Virginia

Region 2: Delaware, Kansas, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, West Virginia and Wisconsin]

Weeds controlled by postemergence or residual activity are listed in Table 3. Preplant burndown treatment tank mixes and rates are:

Herbicide	Rate
Program 1 <sup>1</sup>	
AX-FLUMIOX	2 to 3 oz/A
Plus	
Glyphosate	0.5 to 1.0 lb ai/A
Plus	
2,4-D LVE (2,4-D for use on preplant soybeans	0.5 to 1.0 lb ai/A
only)	
Plus	
NIS + AMS	0.5% x/x + 17 lbs/100 gals of water

#### or

Program 2 <sup>1</sup>	
AX-FLUMIOX	2 to 3 oz/A
Plus	
Glyphosate	0.5 to 1.0 lb ai/A
Plus	
COC <sup>2</sup>	1pt/A
Or	Or .
NIS + AMS	0.5% v/v + 17 lbs/100 gals of water

#### or

Program 3 <sup>1</sup>	
AX-FLUMIOX	2 to 3 oz/A
Plus	
2,4-D LVE (2,4-D for use on preplant soybeans	0.5 to 1.0 lb ai/A (equivalent to 1 to 2 pt/A of 2,4-D
only)	4 LVE)
Plus	
COC	1 pt/A

- 1 Dicamba at 0.188 lb. ai/A can be added to Programs 1, 2 & 3 to assist in the control emerged broadleaves. Refer to dicamba label for rotational restrictions.
- 2 Crop oil concentrate has been found to increase glyphosate burndown of emerged cutleaf eveningprimrose and Carolina geranium.

Table 3. Weeds Controlled by Fall and Spring Preplant Burndown Programs

Weeds Controlled <sup>1</sup>		Postemerge	Postemergence		
COMMON NAME	SCIENTIFIC NAME	Program 1	Program 2	Program 3	Residual
COMMON NAME	SCIENTIFIC NAME	Weeds 3 inc	hes or less	-	
Chamomile, False	Matricaria maritime	Yes	Yes	No	Yes
Cheatgrass	Bromus tectorum	Yes	Yes	No	Yes
Chickweed, Common	Stellaria media	Yes	Yes	No	Yes
Chickweed, Mouseear	Cerastium vulgatum	Yes	Yes	No	Yes
Cockle, White	Silene latifolie	No	Yes	Yes	Yes
Dandelion	Taraxacum officinale	Yes	No	Yes <sup>2</sup>	Yes
Deadnettle, Purple	Lamium purpureum	Yes	Yes	Yes	Yes
Groundsel, Cressleaf	Senecio glabellus	Yes	Yes		Yes
Henbit	Lamium amplexicaule	Yes	Yes	Yes	Yes
Kochia	Kochia scoparia	Yes	Yes	Yes	Yes
Marestail/Horseweed	Conyza canadensis	Yes	Yes <sup>3</sup>	Yes	Yes
Mallow, Common	Malva Neglects	Yes	Yes	No	Yes
Prickly Lettuce	Lactuca serriola	Yes	Yes	Yes	Yes
Wormwood, Biennial	Artemisia biennis	Yes	Yes	Yes	Yes
		Weeds 12 in	ches or less		
Canola, Volunteer	Brassica napus	Yes	Yes	Yes	Yes
Carolina Geranium	Geranium carolinianum	Yes	Yes	Yes	
Evening primrose, Cutleaf <sup>4</sup>	Oenothera laciniata	Yes	Yes	Yes	Yes
Flixweed	Descurainia sophia	Yes	Yes	Yes	Yes
Mustard, Tansy	Descurainia pinnata	Yes	Yes	Yes	Yes
Mustard, Wild	Brassica kaber	Yes	Yes	Yes	Yes
Shepherd's-purse	Capsella bursa-pastoris	Yes	Yes	Yes	Yes

- 1 Refer to glyphosate and/or 2,4-D labels for additional weeds controlled and rotational restrictions.
- 2 Use 1 lb ai per acre of 2,4-D LVE for control of emerged dandelion.
- 3 Program 2 will not control emerged glyphosate resistant marestail/horseweed.
- 4 To control cutleaf evening primrose that are nearing 12 inches in height or are past the rosette stage use Program 1. Use Program 2 or 3 to control cutleaf evening primrose that are 12 inches or less and in the rosette stage.

# SPRING BURNDOWN PROGRAMS

AX-FLUMIOX can be used in combination with labeled preplant burndown herbicides to assist in the postemergence burndown of emerged weeds and provide residual weed control prior to crop emergence. Weeds controlled by residual activity are listed in Table 1.

No-till planters that incorporate the soil during planting may result in decreased weed control in the row. Apply AX-FLUMIOX after planting peanuts and soybeans when these types of planters are used (within 3 days after planting soybeans, within 2 days after planting peanuts and before the crop emerges). AX-FLUMIOX cannot be applied after planting field corn.

AX-FLUMIOX can be used [at 1 to 3 ounce per acre] with labeled preplant burndown herbicides to enhance the speed of burndown and increase weed spectrum.

AX-FLUMIOX can be used [at 1 to 3 ounce per acre [1 to 2 ounce per acre]] in field corn, peanut and soybean burndown programs. See "DIRECTIONS FOR USE IN FIELD CORN", "DIRECTIONS FOR USE IN PEANUT", "DIRECTIONS FOR USE IN SOYBEAN" for more information.

# DIRECTIONS FOR USE IN FALL AND SPRING BURNDOWN PROGRAMS IN COTTON AND SUGARCANEI\*1

[For Use in [Arizona], [California] [and] [Hawaii] Only] [\*Not for Use on Sugarcane in California]

#### **RESTRICTIONS**

- DO NOT apply AX-FLUMIOX to frozen or snow covered soil.
- DO NOT perform any tillage operation after application or residual weed control will be reduced.
- AX-FLUMIOX can be used [at 1 to 2 ounces per acre] with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum.
- A minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between AX-FLUMIOX application and planting of conventionally tilled cotton.
- A minimum of 14 days must pass, and 1 inch of rainfall/irrigation must occur, between AX-FLUMIOX application and planting of no-till or strip-till cotton when a AX-FLUMIOX rate of 1 ounce per acre is used and 21 days when a AX-FLUMIOX rate of 1.5 to 2 ounces per acre is used. The field must contain the stubble from the previous crop.
- AX-FLUMIOX can be applied as part of a burndown application to sugarcane until cane emergence.
- Observe all rotational intervals prior to planting as listed in the "ROTATIONAL RESTRICTIONS" table.
- Refer to most restrictive label for minimum interval between application and planting.

#### **FALL BURNDOWN PROGRAMS**

AX-FLUMIOX [, at 2 to 4 ounces per acre,] can be used in the fall to provide residual weed control in fields that will be planted the following spring with cotton or sugarcane [(refer to Rotational Restrictions table for rates and rotational intervals prior to planting)]. Weeds controlled by residual activity are listed in Table 1 and Table 7. If weeds have emerged at the time of application, use AX-FLUMIOX in combination with a labeled burndown herbicide. [Application must be made no earlier than October 15 in Region 2 or November 15 in Region 1 or when soil temperature falls below 50°F at a 2 inch depth to maintain residual weed control into the spring (April 1 in Region 1 and May 1 in Region 2) or up until planting, whichever comes first.]

[AX-FLUMIOX can be used in a fall burndown or fallow seedbed program outside of Regions 1 and 2.]

Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

# **SPRING BURNDOWN PROGRAMS**

AX-FLUMIOX [at 1 to 2 ounces per acre] can be used in combination with labeled preplant burndown herbicides to assist in the postemergence burndown of emerged weeds and provide residual weed control prior to crop emergence in fields that will be planted with cotton or sugarcane. Weeds controlled by residual activity are listed in Table 1.

No-till planters that incorporate the soil during planting may result in decreased weed control in the row.

# DIRECTIONS FOR USE IN FALL AND SPRING BURNDOWN PROGRAMS IN RICE, SORGHUM, SUNFLOWERS, TOBACCO AND WHEAT (Preplant to Crop)

[For Use in [Arizona], [California] [and] [Hawaii] Only]

# **RESTRICTIONS**

- DO NOT apply AX-FLUMIOX to frozen or snow covered soil.
- DO NOT perform any tillage operation after application or residual weed control will be reduced.
- AX-FLUMIOX can be used [at 1 to 2 ounces per acre] with labeled burndown herbicides to enhance
  the speed of burndown and increase weed spectrum. A minimum of 30 days must pass, and 1 inch of
  rainfall/irrigation must occur, between AX-FLUMIOX application and planting of rice, sorghum,
  sugarcane, sunflowers, tobacco or wheat. Refer to most restrictive label for minimum interval between
  application and planting.
- [Observe all rotational intervals prior to planting as listed in the "ROTATIONAL RESTRICTIONS" table.]

#### **FALL BURNDOWN PROGRAMS**

AX-FLUMIOX can be used in combination with labeled burndown programs to control emerged weeds and provide residual weed control in fields that will be planted the following spring [(refer to Rotational Restrictions table for rates and rotational intervals prior to planting)]. [Application must be made no earlier than October 15 in Region 2 or November 15 in region 1 or when soil temperature falls below 50°F. at a two inch depth to maintain residual weed control into the spring.]

Abnormally warm winters may reduce the length of weed control observed in the spring.

# **SPRING BURNDOWN PROGRAMS**

AX-FLUMIOX can be used in combination with labeled burndown programs to control emerged weeds and provide residual weed control prior to crop emergence. Weeds controlled by residual activity are listed in Table 1 Section A. Crops that will be planted following application must be in compliance with the rotational interval listed in the "Rotational Restriction" table above.

No-till planters that incorporate the soil during planting may result in decreased weed control in the row.

# DIRECTIONS FOR USE IN FALL BURNDOWN PROGRAMS IN FIELDS TO BE PLANTED TO BARLEY, FIELD PEA, FLAX, LENTIL, SAFFLOWER, SUNFLOWER AND SPRING WHEAT (Preplant to Crop)

[For Use in [Arizona], [California] [and] [Hawaii] Only]

# **RESTRICTIONS**

- DO NOT apply AX-FLUMIOX to frozen or snow covered soil.
- DO NOT perform any tillage operation after application or residual weed control will be reduced.
- AX-FLUMIOX can be mixed with 2,4-D and/or glyphosate formulations labeled for burndown programs (preplant to crop) in accordance with the most restrictive label limitations and precautions. Labeled application rates cannot be exceeded. **DO NOT** mix AX-FLUMIOX with any product containing a label prohibition against such mixing.
- [Observe all rotational intervals prior to planting as listed in the "ROTATIONAL RESTRICTIONS" table.]

#### **FALL BURNDOWN PROGRAMS**

AX-FLUMIOX can be used [at 2 to 4 ounces per acre] with labeled burndown herbicides to enhance the speed of burndown, increase weed spectrum and provide residual weed control of the weeds listed in Table 3 until the following spring. Rotational intervals must be followed for crop to be planted in the spring following the fall AX-FLUMIOX application. Refer to most restrictive label for minimum interval between application and planting.

# **DIRECTIONS FOR USE IN FALLOW LAND**

[For Use in [Arizona], [California] [and] [Hawaii] Only]

AX-FLUMIOX may be used as a preemergence fallow treatment. Weeds controlled by residual activity are listed in Table 1.

AX-FLUMIOX [at 2 to 4 ounces per acre] can be used in the fall to provide residual weed control in fallow fields [(refer to Rotational Restrictions table for rates and rotational intervals prior to planting)]. If weeds have emerged at the time of application, use AX-FLUMIOX in combination with a labeled fallow herbicide. [Application must be made no earlier than October 15 in Region 2 or November 15 in Region 1 or when soil temperature falls below 50°F at a 2 inch depth to maintain residual weed control into the spring (April 1 in Region 1 and May 1 in Region 2).] Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

AX-FLUMIOX [ at 1 to 4 ounces per acre] can be used in spring in combination with labeled burndown herbicides to control emerged weeds and provide residual weed control.

# DIRECTIONS FOR FALLOWBED USE ON TRANSPLANTED MELON, PEPPER AND TOMATO BEDS.

[For Use in [Arizona,] [California] [and] [Hawaii] only]

#### **RESTRICTIONS**

- **DO NOT** apply more than 4 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 4 ounces of AX-FLUMIOX per acre per year.

Many weather related factors, including high wind or heavy rains or cool conditions at or near crop transplanting, may result in crop injury in fields treated with AX-FLUMIOX. On occasion this has resulted in a delay in maturity.

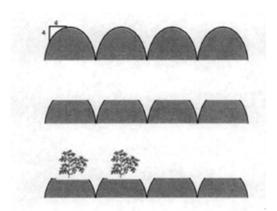
#### **TIMING TO CROP**

#### **AX-FLUMIOX FALLOWBED USE PRIOR TO TRANSPLANTING**

AX-FLUMIOX RATES	ADJUVANT	GPA	TRANSPLANTING INTERVAL		
4oz / A	Required by burndown	Ground - 20 to 40	2 Months		
	tank mix partner				
Application Method: Apply with a burndown herbicide labeled for the control of emerged weeds. AX-					
FLUMIOX, when used alone, will not provide satisfactory control of emerged weeds.					

# USE RESTRICTIONS FOR AX-FLUMIOX FOR PREEMERGENCE FALLOWBED WEED CONTROL PRIOR TO TRANSPLANTING

- 1. Always read and follow all label directions when using any pesticide alone or in tank mix combinations.
- 2. The top 4 inches of the bed, from a horizonal and vertical perspective, where the crop will be transplanted, must be removed prior to transplanting.
- 3. Use only healthy transplants. **DO NOT** use on direct seeded crops.



Beds are formed and AX-FLUMIOX is applied with a burndown herbicide.

A minimum of 2 months after AX-FLUMIOX application, the tops of the beds are removed and the soil from the tops of the beds is placed in the area between the beds.

Crops are transplanted into beds.

- 4. [On flat beds (tomato only), the soil must be incorporated to a depth of at least 4 inches, twice, prior to transplanting. Failure to incorporate may result in stand reduction and/or crop injury.]
- 5. This use pattern makes no claim for in-season weed control after the beds have been disturbed.
- 6. **DO NOT** apply when weather conditions favor spray drift.

# **DIRECTIONS FOR USE IN ESTABLISHED ALFALFA**

# **RESTRICTIONS**

- **DO NOT** apply more than 4 ounces of AX-FLUMIOX acre per application.
- **DO NOT** apply more than 8 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** make a sequential AX-FLUMIOX application within 60 days of the first AX-FLUMIOX application.
- **DO NOT** apply of AX-FLUMIOX to alfalfa with greater than 6 inches of growth. Application will result in burning of treated leaves and stems.
- DO NOT apply of AX-FLUMIOX within 25 days of harvest or grazing.

- **DO NOT** use on alfalfa grown for seed unless approved by a State authority to support a Special Local Need (SLN) under FIFRA section 24(c).
- Only apply with an adjuvant or tank mix with products formulated as an emulsifiable concentrate "EC" when targeting control of emerged weeds.
- Crop burn and/or stunting should be expected and accepted if AX-FLUMIOX is used with an adjuvant, a tank mix partner formulated as an emulsifiable concentrate (EC) or a tank mix partner formulated with an adjuvant.
- Application with paraguat can be used to burndown winter annuals prior to winter dormant period.
- **DO NOT** use on intended mixed alfalfa-grass stands.

#### **TIMING TO ALFALFA**

AX-FLUMIOX may be applied to established alfalfa with a maximum amount of growth of 6 inches or less for the preemergence control of the weeds listed in Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX. Established alfalfa is defined as alfalfa planted in the fall or spring which has gone through a first cutting/mowing. Application to alfalfa with greater than 6 inches of growth may result in unacceptable crop injury.

For control of winter annual weeds: the best timing for preemergence control is in the fall immediately after the last cutting or sheeping-off has occurred.

For control of summer annual weeds: the best timing for preemergence control is in the spring prior to alfalfa growth and before 6 inches of growth.

#### **TIMING TO WEEDS**

# **Preemergence - Preemergence To Weeds**

Apply AX-FLUMIOX before alfalfa growth exceeds 6 inches in height for the preemergence control of weeds listed in Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX. Make applications as soon as possible after cutting and removing alfalfa to minimize injury to alfalfa growth.

#### Postemergence Dodder Suppression[\*]

Apply AX-FLUMIOX at 4 ounces per acre with an adjuvant for postemergence suppression of dodder. Tank mixes with Imazethapyr or Imazamox will increase control. [\*Not for use in California]

#### **DIRECTIONS FOR USE IN ARTICHOKE**

#### **RESTRICTIONS**

- **DO NOT** apply more than 4 ounces of AX-FLUMIOX per acre per application on annual or perennial artichoke varieties after new planting.
- **DO NOT** apply more than 6 ounces of AX-FLUMIOX per acre per application on perennial artichoke varieties after cutback.
- DO NOT apply more than 6 ounces of AX-FLUMIOX per acre per year.
- Application to artichoke foliage may result in unacceptable crop injury.

# **TIMING TO ARTICHOKE**

**Annual Varieties:** AX-FLUMIOX may be applied to artichoke beds prior to transplanting. Application of AX-FLUMIOX must be made to the beds no later than 2 days prior to transplanting. Irrigation or rainfall after transplanting is necessary to activate the AX-FLUMIOX. **DO NOT** irrigate the AX-FLUMIOX before transplanting. Heavy irrigation or rainfall may result in crop injury. The injury is usually transitory and the plants will quickly grow out of the crop damage. Minimize soil disturbance during transplanting, as preemergence weed control will decrease as soil disturbance increases.

**Perennial Varieties:** AX-FLUMIOX may be applied to artichokes after planting of crown pieces or "cut back" of mature plants. Applications of AX-FLUMIOX must be made within 2 days after planting or cut back and prior to artichoke emergence. Application after the artichokes have begun to crack, or are emerged, will result in crop injury. **DO NOT** apply when artichokes have begun to emerge (cracking).

#### **TIMING TO WEEDS**

# Pre-plant (annual)/Preemergence (perennial) to Artichokes - Preemergence to Weeds

Apply AX-FLUMIOX pre-plant to annual artichokes for preemergence control of the weeds. For perennial artichokes apply before cracking for preemergence control of the weeds. Apply prior to weed emergence. A post-emergence herbicide may be necessary to control emerged weeds. AX-FLUMIOX may be applied to annual or perennial artichokes as specified above for preemergence control of weeds listed in Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX.

#### **DIRECTIONS FOR USE IN ESTABLISHED ASPARAGUS**

# **RESTRICTIONS**

- **DO NOT** apply more than 6 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 6 ounces of AX-FLUMIOX per acre per year.
- Apply only to dormant asparagus no less than 14 days before spears emerge. Application to non-dormant asparagus may result in unacceptable crop injury.
- **DO NOT** work soil within 60 days prior to application in the spring. Soil can be worked after spear harvest in preparation for AX-FLUMIOX application prior to fern emergence. Treated soil that is splashed onto the ferns may result in spotting.

#### **TIMING TO ASPARAGUS - Dormant**

AX-FLUMIOX may be applied to dormant asparagus for preemergence control of the weeds listed in Table 10, Weeds Controlled by Preemergence Application of AX-FLUMIOX. Application to non-dormant asparagus will result in unacceptable crop injury. Applications must be made no less than two weeks prior to spear emergence and must be sprinkler or rainfall incorporated with 0.5 to 0.75 inches of water or some scoring may result.

# **TIMING TO ASPARAGUS - Post Harvest**

Apply AX-FLUMIOX after the final harvest of the season, but prior to fern emergence, for preemergence control of the weeds listed in Table 10, Weeds Controlled by Preemergence Application of AX-FLUMIOX. Application after fern emergence will result in unacceptable crop injury. Apply no less than two weeks prior to fern emergence and must be sprinkler or rainfall incorporated with 0.5 to 0.75 inches of water. Add a burndown tank mix partner for the control of emerged weeds labeled for asparagus in accordance with the most restrictive labeled limitations and precautions.

#### **TIMING TO WEEDS**

# **Burndown - Dormant Asparagus, Postemergence to Weeds**

AX-FLUMIOX may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where asparagus is dormant. For control of emerged weeds, tank mix AX-FLUMIOX with paraquat. Refer to paraquat label for specified rate and application parameters. To ensure thorough coverage, use a minimum of 15 gallons, of spray solution per acre. AX-FLUMIOX tank mixes applied to assist in the control of emerged weeds must be applied with a non-ionic surfactant at 0.25% v/v. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to increase herbicidal activity.

# Burndown - After Last Harvest of Season, Postemergence to Weeds

Use AX-FLUMIOX for residual weed control and to assist in postemergence burndown for many annual and perennial weeds where asparagus harvest has been completed for the year. For control of emerged weeds, use a labeled tank mix partner with activity on the emerged weeds.

Preemergence - Dormant Asparagus or After Last Harvest of Season, Preemergence to Weeds Apply AX-FLUMIOX to dormant asparagus for the preemergence control of weeds listed in Table 10, Weeds Controlled by Preemergence Application of AX-FLUMIOX.

#### **DIRECTIONS FOR USE IN CELERY**

[For Use in [California,] [Michigan] [and] [Wisconsin] Only]

# **RESTRICTIONS**

• DO NOT apply more than 3 ounces of AX-FLUMIOX per acre during a pre-transplant application.

- [In the state of California, use as pre-transplant application only.]
- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre during a post-transplant application.
- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per year.
- DO NOT use with an adjuvant.
- Post transplant applications must be made between 3 to 7 days following transplanting.
- DO NOT apply as part of a tank mix.

#### TIMING TO CELERY

Apply AX-FLUMIOX at 3 ounces per acre prior to transplanting, or between 3 and 7 days following transplanting, for preemergence control of the weeds listed in Table 1, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX.

# **TIMING TO WEEDS**

Use AX-FLUMIOX prior to weed emergence for residual control.

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed. AX-FLUMIOX, when applied according to label use directions, will control the weeds listed in Table 1, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX. This label makes no claims concerning control of other weed species.

# **DIRECTIONS FOR USE ON CHICKPEA (GARBANZO BEAN)**

[For Use Only In [Arizona], [California], [Hawaii], [Idaho], [Oregon] [and] [Washington]

#### **RESTRICTIONS**

- **DO NOT** apply more than 2.0 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 2.0 ounces of AX-FLUMIOX per acre per year.
- Many weather related factors, including high wind, splashing or heavy rains or cool conditions at or near crop emergence, may result in garbanzo bean injury in fields treated with AX-FLUMIOX. On occasion this has resulted in a delay in maturity.

# **TIMING TO CHICKPEA (GARBANZO BEAN)**

AX-FLUMIOX may be applied to garbanzo beans within 2 days after planting for the preemergence suppression of the weeds listed in Table A, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX. Tank mix AX-FLUMIOX with other labeled herbicides for broad spectrum weed control.

#### **TIMING TO WEEDS**

AX-FLUMIOX may be applied to garbanzo beans prior to planting or preemergence (after planting). Preemergence application of AX-FLUMIOX must be made within 2 days after planting and prior to garbanzo bean emergence. Application after the garbanzo beans have begun to crack, or are emerged, will result in severe crop injury. Application must not be made when garbanzo beans have begun to crack.

Preplant incorporation (PPI) applications may result in reduced weed control.

# ADDITIONAL RESIDUAL GRASS CONTROL

AX-FLUMIOX can be tank mixed with pendimethalin for additional grass control.

Table A. Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX

BROADLEAF WEED SPECIES						
SECTION A						
COMMON NAME SCIENTIFIC NAME ORGANIC SOIL AX-FLUMIC MATTER TYPE RATE						
Carpetweed	Mollugo verticillata	Up to 5%	All Soil	2 oz/A		
Chickweeds			Types			
Common	Stellaria media					
Mouseear	Cerastium vulgatum					

Dandelion	Taraxacum officinale			
Eclipta	Eclipta prostrata			
Eveningprimrose, Cutleaf	Oenothera laciniata			
Field Pennycress	Thlaspi arvense			
Florida Pusley	Richardia scabra			
Henbit	Lamium amplexicaule			
Lambsquarters, Common	Chenopodium album			
Little Mallow	Malva parviflora	T		
Marestail/Horseweed	Conyza canadensis			
Mayweed/False Chamomile	Matricaria maritima			
Nightshades				
Black	Solarium nigrum			
Eastern Black	Solanum ptycanthum			
Hairy	Solarium sarrachoides			
Pigweeds				
Redroot	Amaranthus retroflexus			
Smooth	Amaranthus hybridus			
Spiny Amaranth	Amaranthus spinosus	٦		
Tumble	Amaranthus albus			
Prickly Lettuce	Lactuca serriola			
Prickly Sida (Teaweed)	Sida spinosa			
Puncturevine	Tribulus terrestris			
Purslane, Common	Portulaca oleracea			
Radish, Wild	Raphanus raphanistrum			
,	Calandrinia ciliata var	٦		
Redmaids	menziesii			
Shepherd's-purse	Capsella bursa-pastoris	٦		
Smallflower Morningglory	Jacquemontia tamnifolia	٦		
Sowthistle, Prickly	Sonchus asper	٦		
Spotted Spurge	Euphorbia maculata	┪		
Venice Mallow	Hibiscus trionum	٦		
SECTION B			I	

SECTION B
All weeds listed in Section A plus:

All weeds listed in Section A plus:					
COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	AX- FLUMIOX RATE	
Coffee Senna	Cassia occidentalis	Up to 3%	All Soil	2 oz/A	
Common Raqweed	Ambrosia artemisiifolia		Types		
False Chamomile	Tripleurospermum		1		
Florida Beqqarweed	Desmodium tortuosum				
Golden Crownbeard	Verbesina encelioides				
Hairv Indigo	Indiciofera hirsuta				
Hemp. Sesbania	Sesbania exaltata	3 to 5%	Coarse and	2 oz/A	
Jimsonweed	Datura stramonium		Medium		
Kochia	Kochia scoparia		Soils:		
London Rocket	Sisvmbrium irio		(sandy		
Morningglories			loam,		
Entireleaf	Ipomoea hederacea var. integriuscula		loamy sand, loamy,		
lvyleaf	Ipomoea hederacea		siltloam,		
Red/Scarlet	Ipomoea coccinea		silt,		
Tall	Ipomoea purpurea		sandy clay,		
Mustard, Wild	Brassica kaber		sandy clay		
Palmer Amaranth	Amaranthus palmeri		loam)		
Spurred Anoda	Anoda cristata		Fine Soils:		

Tropic Croton	Croton Qlandulosus	(silty clay,	2 oz/A
Waterhemps		silty clay	
Common	Amaranthus rudis	loam, clay,	
Tall	Amaranthus tuberculatus	clay loam)	
Wild Poinsettia	Euphorbia heterophvlla		
Yellow Rocket[*]	Barbarea vulqaris		
[*Not for use in California.]			

# DIRECTIONS FOR USE ON CABBAGE AND CHINESE CABBAGE (TIGHT HEADED VARIETIES ONLY)[\*] ROW MIDDLES

[\*Not for Use in California]

# DIRECTIONS FOR USE IN ROW MIDDLES RESTRICTIONS

- AX-FLUMIOX can only be applied in row middles between raised plastic mulched beds that are at least
  4 inches higher than the treated row middle and the mulched bed must have a minimum of a 24-inch
  bed width.
- Spray must remain between raised beds and contact no more than the bottom 1 inch of the side of the raised bed.
- **DO NOT** apply after crops are transplanted.
- **DO NOT** apply more than 4 ounces of AX-FLUMIOX per acre per application.
- **NOT** apply more than 8 ounces of AX-FLUMIOX per application.
- All applications must be made with shielded or hooded equipment.
- Injury can occur if soil particles treated with AX-FLUMIOX contact the crop.
- A rainfall after application but prior to transplanting is required.

#### **RATE**

Up to 4 ounces of AX-FLUMIOX per acre per application

# **TIMING TO CROP**

AX-FLUMIOX may be applied at 4 ounces per acre as a shielded or hooded application to row middles after plastic is laid up to transplanting. Spray must be directed to the row middle and contact no more than the bottom 1 inch of the side of the raised bed. If the top of the mulch beds (where plants are to be transplanted) is contacted, severe injury can occur due to foliage contact with treated plastic.

#### WEED CONTROL AND TANK MIXING

AX-FLUMIOX provides preemergence residual control of the weeds listed in Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX, as well as to assist in the postemergence control of emerged weeds. A registered preemergence grass herbicide may be added for control of additional grassy weeds. For control of emerged weeds, tank mix AX-FLUMIOX with paraquat, carfentrazone, glyphosate, or other registered burndown herbicide. Refer to tank mix partner label for specified rates.

# DIRECTIONS FOR USE ON CACTUS (PRICKLY PEAR)[\*]

[\*Not for Use in California]

#### **RESTRICTIONS**

- **DO NOT** apply more than 12 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 12 ounces per acre per year.
- Use a maximum AX-FLUMIOX rate of 6 ounces of AX-FLUMIOX per acre per application on any soil that has a sand plus gravel content over 80% if plants are less than 3 years of age. (Two applications of 6 ounces per acre in a 12 month period can still be made as long as there have been 60 days between applications).
- **DO NOT** apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.

- Raise mower height during all mowing to reduce dust. Dust created by mowing can drift onto desirable vegetation resulting in injury.
- **DO NOT** mow treated areas. Dust created by mowing may drift onto desirable vegetation resulting in injury.
- Follow the most restrictive label limitations and precautions of the tank mix product(s) being used.
- Avoid direct or indirect spray contact to foliage.
- **DO NOT** apply within 60 days prior to harvest.
- DO NOT apply to plants established less than one year.

Apply AX-FLUMIOX as a uniform broadcast application to the plantation floor or as a uniform band directed at the base of the cactus. Apply AX-FLUMIOX in the fall to maximize the potential for rainfall to activate and set the herbicide. **DO NOT** apply over the top of crop or allow spray to come in contact with crop as a result of application or drift.

# **Preemergence Application**

Apply 6 to 12 ounces (0.188 to 0.38 lb ai) of AX-FLUMIOX per broadcast acre as a preemergence application. AX-FLUMIOX applications must be made prior to weed emergence for control of weeds listed in Table 10, Weeds Controlled by Preemergence Application of AX-FLUMIOX. Make preemergence (to weed emergence) applications of AX-FLUMIOX to a weed-free soil surface. Preemergence applications of AX-FLUMIOX must be completed prior to weed emergence. Moisture is necessary to activate AX-FLUMIOX on soil for residual weed control. Dry weather following application of AX-FLUMIOX may reduce effectiveness. However, when adequate moisture is received after dry conditions, AX-FLUMIOX will control susceptible germinating weeds.

# [Postemergence Application

Apply 6 to 12 ounces (0.188 to 0.38 lb ai) of AX-FLUMIOX per broadcast acre plus an adjuvant (0.25% v/v nonionic surfactant or 1 quart per acre crop oil concentrate). The addition of an adjuvant enhances AX-FLUMIOX activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of AX-FLUMIOX.

Refer to Table 1, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX for weeds controlled by the residual activity of AX-FLUMIOX. Tank mix AX-FLUMIOX with a labeled burndown herbicide for control of the emerged weeds.

Residual weed control will be reduced if vegetation prevents the AX-FLUMIOX from reaching the soil surface. If vegetation is heavy, use a burndown herbicide with AX-FLUMIOX and make a sequential AX-FLUMIOX application prior to the emergence of new weeds.]

# **Carrier Volume and Spray Pressure**

To ensure thorough coverage in burndown applications, use a minimum of 15 gallons of spray solution per acre. Use higher gallonage if dense vegetation or heavy crop residue is present.

Nozzle selection must meet manufacturer's gallonage and pressure specifications.

# **Banded Application**

Rates listed in Table 13, Weeds Controlled by Postemergence Activity of AX-FLUMIOX Tank Mixes, refer to a broadcast application covering the entire acre. Refer to the Band Application table in Use Information Section to calculate amount needed per acre when making a banded application.

# **DIRECTIONS FOR USE IN COTTON**

[For Use in [Arizona], [California] [and] [Hawaii] Only]

#### RESTRICTIONS

- **DO NOT** apply more than 2 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 4 ounces of AX-FLUMIOX per acre per year.
- DO NOT make a sequential AX-FLUMIOX application within 30 days of the first AX-FLUMIOX application.

• DO NOT apply within 60 days of harvest.

# ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE Hooded, Shielded and Layby Application

For best results, apply AX-FLUMIOX to actively growing weeds within the growth stages indicated in this label. Applying AX-FLUMIOX under conditions that do not promote active weed growth will reduce herbicide effectiveness. **DO NOT** apply AX-FLUMIOX when the crop or weeds are under stress due to drought, excessive water, extremes in temperature, disease or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. AX-FLUMIOX is most effective when applied under sunny conditions at temperatures above 65°F.

AX-FLUMIOX is rainfast one hour after application. **DO NOT** apply if rain is expected within one hour of application or postemergence efficacy may be reduced. Rainfall within one hour of application will not adversely affect residual activity.

#### HERBICIDE RATE

# Hooded, Shielded and Layby Application

For postemergence weed control, apply AX-FLUMIOX through a hooded or shielded sprayer or at layby, at 2 ounces per acre, in combinations with MSMA or at 1 to 2 ounces per acre in combination with glyphosate, to assist in the control of weeds listed in Table 4. Residual weed control can also be obtained through hooded, shielded and layby application of AX-FLUMIOX. Weeds that are controlled through residual activity of AX-FLUMIOX are listed in Table 1. Weeds that are suppressed by residual activity of AX-FLUMIOX are listed in Table 2.

Table 4. Emerged Broadleaf Weeds Controlled by Hooded, Shielded and Layby Application of AX-

FLUMIOX Tank Mixes with Glyphosate or MSMA in Cotton

BROADLEAF WEED SPECIES		WEED HEIGHT (inches)
COMMON NAME	SCIENTIFIC NAME	2 oz/A
Bindweed, Field <sup>1</sup>	Convolvulus arvensis	4
Carpetweed	Mollugo verticillata	4
Chickweed, Common	Stellaria media	4
Cocklebur, Common	Xanthium strumarium	4
Florida Beggarweed	Desmodium tortuosum	2
Hemp Sesbania	Sesbania exaltata	6
Jimsonweed	Datura stramonium	4
Lambsquarters, Common	Chenopodium album	4
Morningglories		
Entireleaf	Ipomoea hederacea var. integriuscula	4
lvyleaf	Ipomoea hederacea	4
Pitted	Ipomoea lacunose	4
Red	Ipomoea coccinea	4
Tall	Ipomoea purpurea	2
Mustard, Wild	Brassica kaber	6
Nightshades		
Black	Solanum nigrum	4
Eastern Black	Solanum ptycanthum	4
Hairy	Solanum sarrachoides	4
Pigweeds		
Palmer Amaranth	Amaranthus palmeri	4
Red root	Amaranthus retroflexus	4
Smooth	Amaranthus hybridus	4
Plaintain, Broadleaf	Plantago major	6
Prickly Sida (Teaweed)	Sida spinosa	4
Purslane, Common	Portulaca oleracea	2

Ragweeds		
Common	Ambrosia artemisiifolia	2
Giant	Ambrosia trifida	4
Rice Flatsedge	Cyperus iria	2
Sicklepod	Senna obtusifolia	4
Smartweeds		
Ladysthumb	Polygonum persicaria	4
Pale	Polygonum lapathifolium	4
Pennsylvania	Polygonum pensylvanicum	4
Spotted Spurge	Euphorbia maculata	4
Velvetleaf	Abutilon theophrasti	4
Venice Mallow	Hibiscus trionum	2
Waterhemps		
Common	Amaranthus rudis	2
Tall	Amaranthus tuberculatus	2
1 AX-FLUMIOX tank mixes will control	ol the above ground portion of field bindweed. Repeat	ed applications will be needed to control

#### CARRIER VOLUME AND SPRAY PRESSURE

# Hooded, Shielded and Layby Application

To ensure thorough coverage in hooded, shielded and layby applications, use 15 to 30 gallons spray solution per treated acre. Use 20 to 30 gallons per treated acre under heavy weed pressure. Nozzle selection must meet manufacturer's gallonage and pressure specifications for application method being used. **DO NOT** use "Flood Jet" nozzles, as they tend to increase the chance of crop injury.

#### **ADDITIVES**

regrowth.

# Hooded, Shielded and Layby Application

Weed control from hooded, shielded or layby application of AX-FLUMIOX in cotton requires the addition of an agronomically approved non-ionic surfactant to the spray mixture. Non-ionic surfactant must contain at least 80% active ingredient. Verify mixing compatibility qualities by a jar test. The use of crop oil concentrates, methylated seed oils, organo-silicant surfactants or products containing these ingredients, may result in severe crop injury and must not be used.

# **APPLICATION EQUIPMENT**

Apply AX-FLUMIOX tank mixes, with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume. Ensure that application equipment is clean and in good repair. Nozzles must meet manufacturer's specifications for spray pattern and placement on spray boom and must be checked frequently for accuracy.

# **TIMING TO COTTON**

# **Hooded and Shielded Application**

AX-FLUMIOX tank mixes may be applied with a hooded or shielded sprayer after cotton has reached a minimum of 6 inches in height. All nozzles must be under the hood or behind the shield to ensure no spray solution comes in contact with the cotton. Care must be taken to ensure the spray solution or drift does not come in contact with the cotton or severe crop injury can occur.

# **Layby Application**

Layby application of AX-FLUMIOX tank mixes may be made once cotton has reached a minimum of 16 inches in height. Cotton that is smaller than 16 inches in height may be injured by AX-FLUMIOX applications. AX-FLUMIOX application must be directed to the lower 2 inches of the cotton stem to avoid crop injury.

#### **TIMING TO WEEDS**

AX-FLUMIOX tank mix applications must be made to weeds within the height range given in Table 4.

#### **TANK MIXES**

AX-FLUMIOX must be tank mixed with one of the herbicides listed in Table 5 for postemergence control of the weeds listed in Table 4.

Table 5. Tank Mixes with AX-FLUMIOX for Hooded, Shielded and/or Layby Use in Cotton

TANK MIX PARTNER	TARGET WEEDS	HOODED AND SHIELDED	LAYBY	
Glyphosate	Perennial Grasses and Broadleaves	Х	X <sup>1</sup>	
MSMA	Annual Grasses	X	X	
	Yellow Nutsedge			
<sup>1</sup> For use only in cotton with the Roundup Ready or glyphosate resistant gene.				

# DIRECTIONS FOR USE IN CUCURBIT VEGETABLES[\*] (ROW MIDDLES) [\*Not for Use in California]

**Cucurbit Vegetables (Crop Group 9) including**: chayote (fruit); Chinese Waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon

#### **RESTRICTIONS**

- **DO NOT** apply more than 4 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 8 ounces of AX-FLUMIOX per acre per year.
- DO NOT use with an adjuvant.
- Grow plants on raised plastic mulched beds that are higher than the treated row middle.
- Arizona, California and Hawaii only: For fallowbed application on transplanted melon beds follow directions for use below.
  - Spray must be directed to the row middle, away from the crop bed and with minimal contact with plastic, including the sides of the bed. If top of mulch beds (where plants are to be transplanted) is contacted, severe injury can occur due to foliage contact with treated plastic. In this scenario, a rainfall event of 1/2 inch (natural or irrigation) must occur prior to transplanting to reduce AX-FLUMIOX residues.
  - Drift of treated soil particles onto plants may cause contact injury.
  - Irrigate treated field after application and prior to transplanting with minimum of 1/4 inch of water if rainfall does not occur between application and transplanting.
  - All applications must be made with hooded or shielded equipment.

#### TIMING TO CUCURBIT VEGETABLES

Apply AX-FLUMIOX at 4 ounces per acre as a hooded or shielded application to row middles up to 14 days prior to transplanting or seeding for preemergence control of the weeds listed in Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX, as well as to assist in the postemergence control of emerged weeds. A second application of AX-FLUMIOX at 4 ounces per acre may be applied up to 21 days after transplanting or emergence if needed. **DO NOT** apply during or after bloom.

#### **TIMING TO WEEDS**

AX-FLUMIOX may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds in row middles. A registered preemergence grass herbicide may be added for control of additional grassy weeds. For assisting in the control of emerged weeds, tank mix AX-FLUMIOX with paraquat, carfentrazone-ethyl or other registered burndown herbicide. **DO NOT** tank mix with glyphosate after transplanting. Refer to tank mix partner's label for specified rate and application parameters.

Read tank mix product label for rate and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must

be followed. AX-FLUMIOX, when applied according to label use directions, will control the weeds listed in Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX. This label makes no claims concerning control of other weed species.

#### **DIRECTIONS FOR USE IN DRY BEANS**

Dried cultivars of bean (*Lupinus*); bean (*Phaseolus*) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean); bean (Vigna) (includes adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean (dry); chickpea; guar; lablab bean and lentil

**WEED SUPPRESSION** [Weed Suppression section not to be shown on production label] **RESTRICTIONS** 

- DO NOT apply more than 1.5 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 1.5 ounces of AX-FLUMIOX of per acre per year.

Many weather related factors, including high wind, splashing or heavy rains or cool conditions at or near crop emergence, may result in dry bean injury in fields treated with AX-FLUMIOX. On occasion this has resulted in a delay in maturity.

### **TIMING TO DRY BEAN**

AX-FLUMIOX may be applied to dry beans within 2 days after planting for the preemergence suppression of the weeds listed in Table 8, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX or Table 8, Weeds Suppressed by Residual Activity of AX-FLUMIOX at 1.5 ounces per acre. Tank mix AX-FLUMIOX with other labeled herbicides for broad spectrum weed control.

#### **TIMING TO WEEDS**

AX-FLUMIOX may be applied to dry beans prior to planting or preemergence (after planting). Preemergence application of AX-FLUMIOX must be made within 2 days after planting and prior to dry bean emergence. Application after the dry beans have begun to crack, or are emerged, will result in severe crop injury. To avoid severe crop injury, **DO NOT** apply to dry beans after beans begin to crack or have emerged.

Preplant incorporation (PPI) applications may result in reduced weed control.

### ADDITIONAL RESIDUAL GRASS CONTROL

AX-FLUMIOX can be tank mixed with pendimethalin for additional grass control.

# HARVEST AID RESTRICTIONS

- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** harvest within 5 days of application.

Desiccation from AX-FLUMIOX requires the addition of an agronomically approved adjuvant to the spray mixture. Use a methylated seed oil which contains at least 15% emulsifiers and 80% oil at 2% v/v. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or a 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to the spray mixture along with either a crop oil concentrate or methylated seed oil to enhance desiccation. The addition of a nitrogen source does not replace the need for a crop oil concentrate or a methylated seed oil. Tank mixing AX-FLUMIOX with glyphosate or paraquat will increase control of emerged weeds and aid in harvest. Add a burndown tank mix partner for the control of emerged weeds labeled for dry bean in accordance with the most restrictive labeled limitations and precautions.

#### TIMING TO DRY BEANS

Apply when crop is mature and at least 80% of the pods are yellowing and mostly ripe with no more than 40% (bush type beans) or 30% (vine type beans) of the leaves still green in color. Dry beans can be harvested 5 days after application. To ensure thorough coverage use 15 to 30 gallons spray solution per

acre. Nozzle selection must meet manufacturer's gallonage and pressure specifications for postemergence application.

#### **DIRECTIONS FOR USE IN FIELD CORN**

[For Use in [Arizona], [California] [and] [Hawaii] Only]

#### RESTRICTIONS

- Use only on no-till or minimum tillage fields where last year's crop residue has not been incorporated into the soil.
- Corn must be planted between 14 and 30 days after application unless the application is made as part of a Fall burndown program.
- Corn can be planted 7 days after an application of 2 ounces per acre if a minimum of 25% of the soil surface is covered with the residue of the preceding crop and a minimum of 1/4 inch of rainfall has occurred between application and planting.
- DO NOT apply more than [2 ounces] 3 ounces of AX-FLUMIOX per acre application.
- DO NOT apply more than [2 ounces] 3 ounces of AX-FLUMIOX per acre per year.
- DO NOT irrigate between emergence and 2-leaf corn.
- DO NOT use on popcorn, sweet corn or corn grown for seed.

#### TIMING TO FIELD CORN

- Apply AX-FLUMIOX, at 2 to 3 ounces per acre, between 7 and 30 days prior to planting field corn, for the preemergence control of the weeds listed in Table 1, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX.
- Apply AX-FLUMIOX at 2 ounces per acre between 7 and 30 days prior to planting field corn if a minimum of 25% of the soil surface is covered with the residue of the preceding crop and a minimum of 1/4 inch of rainfall has occurred between application and planting.
- Apply AX-FLUMIOX at 3 ounces per acre between 14 and 30 days prior to planting field corn.

# **Burndown Use Directions - For Preplant Applications in Field Corn**

AX-FLUMIOX, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many weeds where field corn will be planted directly into the residue of the previous year. See Directions for Use in Fall and Spring Preplant Burndown and Fallow Seedbed Programs in Field Corn, Peanut and Soybean for rates and timing of applications. For control of emerged weeds, AX-FLUMIOX must be applied with an appropriate burndown tank mix partner listed in Table 6. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Refer to tank mix partner's label for specified application pressure and adjuvant systems.

### INCREASING SPEED OF GLYPHOSATE BURNDOWN ACTIVITY

AX-FLUMIOX, at 1 ounce per acre, may be tank mixed with glyphosate to increase the speed of burndown activity compared to glyphosate applied alone. Residual weed control will not be provided at rates lower than 2 ounces per acre; however, suppression of the weeds in Table 2 may occur at AX-FLUMIOX rates as low as 1 ounce per acre. Applications of AX-FLUMIOX at 1 ounce per acre must be made a minimum of 14 days prior to planting field corn.

#### **TANK MIXES**

AX-FLUMIOX may be tank mixed with the herbicides listed in Table 6 for pre-plant burndown applications. Refer to tank mix partner's label for adjuvant specifications.

Table 6. Tank Mix Partners for Burndown and/or Residual Control of Weeds in Field Corn

TANK MIX PARTNERS <sup>1</sup>		
2,4-D LVE	Metribuzin	
Atrazine	Paraquat	
Clopyralid	Rimsulfuron + Thifensulfuron	
Dicamba	Simazine	
Flumetsulam	Tribenuron	

Glyphosate	
1 Refer to tank mix product labels for specific applic	ation directions.

#### TANK MIX RESTRICTIONS

Tank mixes with flufenacet, metolachlor or s-metolachlor, dimethenamid or dimethenamid-p, alachlor, or acetochlor may result in injury to field corn when application is followed by prolonged periods of cool wet weather and must not be used with AX-FLUMIOX, unless supplemental labeling, provided by Axion Ag Products LLC, is followed.

# **DIRECTIONS FOR USE IN FIELD PEAS[\*]**

[For Use in [Idaho,] [Montana,] [Oregon] [and] [Washington] only.] [\*Not for Use in California]

# WEED CONTROL RESTRICTIONS

- **DO NOT** apply more than 2 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 2 ounces of AX-FLUMIOX per acre per year.

Many weather related factors including high wind splashing or heavy rains or cool conditions at or near crop emergence may result in pea injury in fields treated with AX-FLUMIOX. On occasion this has resulted in a delay in maturity.

#### **TIMING TO FIELD PEAS**

AX-FLUMIOX may be applied to field peas within 2 days after planting for the preemergence control of the weeds listed in Table 1 Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX or Table 8 Weeds Suppressed by Residual Activity of AX-FLUMIOX. Tank mix AX-FLUMIOX with other labeled herbicides for broad spectrum weed control.

# **TIMING TO WEEDS**

AX-FLUMIOX may be applied to field peas prior to planting or preemergence (after planting). Preemergence application of AX-FLUMIOX must be made within 2 days after planting and prior to field pea emergence. To avoid severe crop injury, **DO NOT** apply to field peas after peas begin to crack or have emerged. Preplant incorporation (PPI) applications may result in reduced weed control.

#### ADDITIONAL RESIDUAL GRASS CONTROL

AX-FLUMIOX can be tank mixed with pendimethal in for additional grass control.

# HARVEST AID RESTRICTIONS

- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per year.
- DO NOT harvest within 5 days of application

Desiccation from AX-FLUMIOX requires the addition of an agronomically approved adjuvant to the spray mixture. Use a methylated seed oil which contains at least 15% emulsifiers and 80% oil at 1 quart per acre. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or a 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to the spray mixture along with methylated seed oil to enhance desiccation. The addition of a nitrogen source does not replace the need for methylated seed oil. Tank mixing with glyphosate will increase control of emerged weeds and aid in harvest.

#### **TIMING TO FIELD PEAS**

Apply AX-FLUMIOX at 1.5 to 2 ounces per acre when crop is physiologically mature and a minimum of 80% of the pods are yellow to tan in color and 20% are yellow in color If field peas are treated too early a reduction in seed quality may occur. **DO NOT** spray AX-FLUMIOX on any area of the field with a significant amount of plants with green color. Peas can be harvested 5 days after application. To ensure thorough

coverage use 15 to 30 gallons of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure specifications for postemergence application.

# **DIRECTIONS FOR USE IN FLAX[\*]**

[\*Not for Use in California]

# HARVEST AID RESTRICTIONS

- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per year.
- DO NOT harvest within 5 days of application

Desiccation from AX-FLUMIOX requires the addition of an agronomically approved adjuvant to the spray mixture. A methylated seed oil which contains at least 15% emulsifiers and 80% oil at 1 quart per acre should be used. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or a 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to the spray mixture along with methylated seed oil to enhance desiccation. The addition of a nitrogen source does not replace the need for methylated seed oil.

#### **TIMING TO FLAX**

Apply AX-FLUMIOX at 1.5 to 2 ounces per acre when crop is physiologically mature and at least 75% of the bolls are brown in color. Flax can be harvested 5 days after application.

To ensure thorough coverage use 15 to 30 gallons of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure specifications for postemergence application.

# DIRECTIONS FOR USE IN FRUITING VEGETABLES (INCLUDING OKRA)[\*] ROW MIDDLES

[\*Not for Use in California]

Eggplant, Groundcherry (Physalis spp.), Okra, Pepino; Peppers (including Bell Pepper, Chili Pepper, Cooking Pepper, Pimento, Sweet Pepper), Tomatillo and Tomato

#### **RESTRICTIONS**

- **DO NOT** apply more than 4 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 8 ounces of AX-FLUMIOX per acre per application.
- Grow plants on raised or plastic mulched beds that are higher than the treated row middle.
- [Arizona, California and Hawaii only: For fallowbed application on transplanted peppers and tomato beds follow directions for use in this label.]
- Spray must be directed to the row middle, away from the crop bed and with minimal contact with plastic, including the sides of the bed. If top of mulch beds (where plants are to be transplanted) is contacted, severe injury can occur due to foliage contact with treated plastic. In this scenario, a rainfall event of ½ inch (natural or irrigation) must occur prior to transplanting to reduce AX-FLUMIOX residues.
  - o Drift of treated soil particles onto plants may cause contact injury.
- Irrigate treated field after application and prior to transplanting with minimum of 1/4 inch of water if rainfall does not occur between application and transplanting.
- All applications must be made with hooded or shielded equipment.

## TIMING TO FRUITING VEGETABLES

Apply AX-FLUMIOX at 4 ounces per acre as a hooded or shielded application to row middles up to 14 days prior to transplanting or seeding for preemergence control of the weeds listed in Table 7, Weeds Controlled by Residual Activity of AX-FLUMIOX, as well as to assist in the postemergence control of emerged weeds. A second application of AX-FLUMIOX at 4 ounces per acre may be applied up to 21 days after transplanting or emergence if needed. **DO NOT** apply during or after bloom.

#### **TIMING TO WEEDS**

AX-FLUMIOX may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds in row middles. A registered preemergence grass herbicide may be added for control of additional grassy weeds. For assisting in the control of emerged weeds, tank mix AX-FLUMIOX with paraquat, carfentrazone or other registered burndown herbicide. **DO NOT** tank mix with glyphosate after transplanting or crop emergence. Refer to tank mix partner's label for specified rate and application parameters.

### **DIRECTIONS FOR USE IN GARLIC**

### **RESTRICTIONS**

- **DO NOT** apply more than 6 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 6 ounces of AX-FLUMIOX per acre per year.

#### **TIMING TO GARLIC**

AX-FLUMIOX may be applied, at 6 ounces per acre, to garlic prior to garlic emergence. Application must be made within 3 days after planting garlic.

### **TIMING TO WEEDS**

#### **Preemergence - Preemergence To Weeds**

Apply AX-FLUMIOX to weed free garlic for preemergence control of the weeds listed in Table 10, Weeds Controlled by *Preemergence Application* of AX-FLUMIOX.

### **DIRECTIONS FOR USE IN HOPS**

[Not for Use in [California] [and] [New York]]

#### RESTRICTIONS

- **DO NOT** apply more than 6 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 6 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** allow spray to contact green stem (Unless used for sucker control), foliage, flowers or cones or unacceptable injury may occur.
- DO NOT apply within 30 days of harvest.
- DO NOT use with an adjuvant.

AX-FLUMIOX can be used in hops for preemergence weed control as well as sucker control.

#### TIMING TO HOPS FOR SUCKER CONTROL

Apply AX-FLUMIOX at 6 ounces per acre as a directed application after hops have reached a minimum of 6 feet in height for sucker control. Direct application to the lower 2 feet of the hops.

### TIMING TO HOPS FOR PREEMERGENCE WEED CONTROL

Apply AX-FLUMIOX at 6 ounces per acre as a 1 to 1.5 foot band to each side of the hop row, to dormant hops January thru March to ensure time for rain incorporation and activation. If weeds are emerged at the time of application, tank mix AX-FLUMIOX with a labeled burndown herbicide including paraquat or glyphosate to assist with control of emerged weeds. **DO NOT** mow or rake over treated areas, as dust created by mowing may drift onto sensitive crops or vegetation resulting in injury.

#### **TIMING TO WEEDS**

AX-FLUMIOX applications must be made prior to weed emergence for control of weeds listed in Table 10, Weeds Controlled by Preemergence Application of AX-FLUMIOX.

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed. AX-FLUMIOX, when applied according to label use directions, will control the weeds listed in Table 10, Weeds Controlled by Preemergence Application of AX-FLUMIOX. This label makes no claims concerning control of other weed species.

# **DIRECTIONS FOR USE IN LENTILS[\*]**

[\*Not for Use in California]

# HARVEST AID RESTRICTIONS

- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per year.
- DO NOT harvest within 5 days of application

Desiccation from AX-FLUMIOX requires the addition of an agronomically approved adjuvant to the spray mixture. Use a methylated seed oil which contains at least 15% emulsifiers and 80% oil at 1 quart per year. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or a 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to the spray mixture along with methylated seed oil to enhance desiccation. The addition of a nitrogen source does not replace the need for methylated seed oil. Tank mixing AX-FLUMIOX with glyphosate or paraquat will increase control of emerged weeds and aid in harvest.

### **TIMING TO LENTILS**

Apply AX-FLUMIOX at 1.5 to 2 ounces per acre when crop is physiologically mature and a minimum of 80% of the pods are yellow to tan in color and 20% are yellow in color If lentils are treated to early a reduction in seed quality may occur. **DO NOT** spray AX-FLUMIOX on any area of the field with a significant amount of plants with green color. Lentils can be harvested 5 days after application.

To ensure thorough coverage use 15 to 30 gallons of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure specifications for postemergence application.

# DIRECTIONS FOR USE IN MINT (Peppermint and Spearmint)

## **RESTRICTIONS**

- DO NOT apply more than 4 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 8 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** make a sequential AX-FLUMIOX application within 60 days of the first AX-FLUMIOX application.
- Apply only to dormant mint. Application to non-dormant mint may result in unacceptable crop injury.
- DO NOT apply within 80 days of harvest.
- **DO NOT** apply to row or baby mint, use only on established meadow mint.
- **DO NOT** apply to mint that has been weakened by diseases, insects (example mint root borer), nematodes, drought, soil salts, high soil pH, previous pesticides, winter injury or double cutting, as severe injury may occur. Apply only to healthy vigorous mint with undamaged rhizomes.
- DO NOT apply before November 25 or after March 1.
- DO NOT apply a Fall application if roots and rhizomes are weak, thin or damaged.
- DO NOT apply to stands established longer than 3 years.
- **DO NOT** apply AX-FLUMIOX on mint in Southern Union County (south of Ladd Canyon) or Baker County in Oregon.

Many weather related factors, including high wind, splashing or heavy rains or cool conditions at or near mint emergence, may result in mint injury in fields treated with AX-FLUMIOX.

Tank mix with labeled rates of paraquat specified to control emerged weeds and increase crop safety.

#### **TIMING TO MINT**

As a spray, AX-FLUMIOX may be applied only to established, dormant mint for preemergence control of the weeds listed in Table 7 as well as to assist in the postemergence control of emerged weeds. Application to non-dormant mint or to baby (row) mint (time from planting of mint roots through the first cutting), may result in unacceptable crop injury. As a bulk fertilizer application, AX-FLUMIOX may be applied at least 80 days prior to harvest. Leaves must be dry at the time of applications or severe injury may occur.

### **TIMING TO WEEDS**

# **Burndown - Dormant Mint, Postemergence To Weeds**

AX-FLUMIOX may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where established mint is dormant. For control of emerged weeds, tank mix AX-FLUMIOX with paraquat. Refer to paraquat label for specified rate and application parameters. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. AX-FLUMIOX tank mixes applied to assist in the control of emerged weeds must be applied with a non-ionic surfactant at 0.25% v/v. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to increase herbicidal activity.

# **Preemergence - Dormant Mint, Preemergence To Weeds**

Apply AX-FLUMIOX to dormant mint for the preemergence control of weeds listed in Table 7. Fall applications of AX-FLUMIOX, followed by a sequential application in the Spring, have resulted in better Summer annual weed control than a single Fall or single Spring application.

Fall application is most effective for Fall germinating weeds for example groundsel. Fields plowed or harrowed after a AX-FLUMIOX application will result in less effective preemergence activity. In furrow irrigated fields, corrugating that is done after a AX-FLUMIOX application will expose untreated soil and break the herbicide barrier resulting in poor weed control.

Table 7. Weeds Controlled by Residual Activity of AX-FLUMIOX

BROADLEAF WEED SPEC	CIES				
COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	AX- FLUMIOX RATE	
Bristly Starbur	Acanthospermum hispidum	Up to 5%	All Soil	4 oz/A	
Carpetweed	Mollugo verticillata		Types		
Chickweeds					
Common	Stellaria media				
Mouseear	Cerastium vulgatum				
Coffee Senna	Cassia occidentalis				
Copperleaf, Hophornbeam	Cassia occidentalis				
Dandelion	Taraxacum officinale				
Dodder (suppression only) [*] 1	Cuscuta spp.				
Eclipta	Eclipta prostrate				
Evening Primrose, Cutleaf	Oenothera laciniata				
False Chamomile[*]	Tripleurospermum maritima				
Fiddleneck, Coast[*]	Amsinckia menziesii				
Field Pennycress[*]	Thlaspi arvense				
Fleabane, Hairy[*]	Conyza bonariensis				
Flixweed[*]	Descurainia spophia				
Florida Beggarweed	Desmodium tortuosum				
Florida Pusley	Richardia scabra				
Golden Crownbeard	Verbesina encelioides				
Groundsel, Common	Senecio vulgaris				
Hairy Indigo	Indigofera hirsuta				
Hemp Sesbania	Sesbania exaltata				
Henbit	Lamium amplexicaule				
Jimsonweed	Datura stramonium				
Kochia	Kochia scoparia				
Lambsquarters, Common	Chenopodium album				
Little Mallow	Malva parviflora				
London Rocket[*]	Sisymbrium irio				
Marestail/Horseweed	Conyza canadensis				

Mayweed/False	Matricaria maritima
Chamomile[*]	
Morningglories	
Entireleaf	Ipomoea hederacea var. integriuscula
Ivyleaf	Ipomoea hederacea
Red/Scarlet	Ipomoea coccinea
Smallflower	Jacquemontia tamnifolia
Tall	Ipomoea purpurea
Mustard	
Tansy[*]	Descurainia pinnata
Tumble[*]	Sisymbrium altissimum
Wild[*]	Brassica kaber
Nettle, Burning[*]	Urtica urens
Nightshades	
Black	Solarium nigrum
Eastern Black	Solarium ptycanthum
Hairy	Solanum sarrachoides
Pigweeds	Columnia Garragnolago
Palmer Amaranth	Amaranthus palmeri
Redroot	Amaranthus retroflexus
Smooth	Amaranthus hybridus
Spiny Amaranth	Amaranthus spinosus
Tumble	Amaranthus albus
Prickly Lettuce	Lactuca serriola
•	Lactuca semola
(China Lettuce)	Cide eninese
Prickly Sida (Teaweed)	Sida spinosa
Sowthistle, Prickly[*]	Sonchus asper
Puncturevine	Tribulus terrestris
Purslane	
Common	Portulaca oleracea
Horse[*]	Trianthema portulacastrum
Radish, Wild	Raphanus raphanistrum
Ragweed, Common	Ambrosia artemisiifolia
Redmaids	Calandrinia ciliata var. menziesii
Russian Thistle	Salsola iberica
Shepherd's-purse	Capsella bursa-pastoris
Smartweeds	
Ladysthumb	Polygonum persicaria
Pennsylvania	Polygonum pensylvanicum
Smellmelon[*]	Cucumis melo
Spotted Spurge	Euphorbia maculata
Spurred Anoda	Anoda cristata
Tropic Croton	Croton glandulosus
Velvetleaf	Abutilon theophrasti
Venice Mallow	Hibiscus trionum
Waterhemps	
Common	Amaranthus rudis
Tall	Amaranthus tuberculatus
White Cockle[*]	Silene latifolia
	Silette latitulia
Wild Doincottic	Eupharhia hataranhulla
Wild Poinsettia	Euphorbia heterophylla
Wild Poinsettia Wormwood, Biennial Yellow Rocket[*]	Euphorbia heterophylla Artemisia biennis Barbarea vulgaris

<sup>1</sup> AX-FLUMIOX at 4 ounces per acre will provide postermergence dodder suppression when applied in combination with Pursuit Herbicide or Raptor Herbicide at labeled rates. The use of Pursuit Herbicide and Raptor Herbicide require the use of a NIS, which will result in burn and stunting of alfalfa. Growers should expect and accept this prior to using this tank mix.

[\*Not for use in California.]

Table 7. Weeds Controlled by Residual Activity of AX-FLUMIOX (continued)

<b>BROADLEAF WEED SPE</b>	CIES			
COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	AX- FLUMIOX RATE
<b>GRASS WEED SPECIES</b>		Up to 5%	All Soil Types	4 oz/A
Barnyardgrass	Echinochloa crus-galli	-		
Bluegrass, Annual	Poa annua			
Crabgrass, Large	Digitaria sanguinalis			
Foxtail, Giant	Setaria faberi			
Goosegrass	Eleusine indica			
Lovegrass, California	Eragrostis diffusa			
Panicums				
Fall	Panicum dichotomiflorum			
Texas	Panicum texanum			
Ryegrass, Italian[*]	Lolium multiflorum			
Signalgrass, Broadleaf	Brachiaria platyphylla			
[*Not for use in California.]		•	•	•

# DIRECTIONS FOR USE IN ONION (DRY BULB)[\*]

[For Use in [Michigan,] [New York,] [North Dakota] [and] [Wisconsin] Only]

[\* Not for Use in California]

#### RESTRICTIONS

- **DO NOT** apply more than 2 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre during a single growing season.
- **DO NOT** make sequential application within 14 days of the first application.
- **DO NOT** apply more than 1 ounce of AX-FLUMIOX per season on soils that contain greater than 90% sand plus gravel.
- **DO NOT** apply as part of a tank mix, other than with pendimethalin H20, or unacceptable injury may result. Other formulations of pendimethalin must not be tank mixed with AX-FLUMIOX for use in onions.
- **DO NOT** apply with any type of adjuvant.
- DO NOT apply within 45 days of harvest.

# Use of AX-FLUMIOX may result in necrotic spotting of onion leaves that come in contact with the spray.

# [Microrate Application]

Sequential applications of AX-FLUMIOX may be applied to onions (dry bulb), between the 2-leaf and 6-leaf stage, at rates of 0.5 to 1 ounce per acre, on a 7 day interval.

# **TIMING TO ONIONS (dry bulb)**

Apply AX-FLUMIOX to transplanted onions (dry bulb) between the 2-leaf and 6-leaf stage and on direct seed onions (dry bulb) between the 3-leaf and 6-leaf stage.

#### **TIMING TO WEEDS**

### Preemergence - Emerged Onions (dry bulb), Preemergence To Weeds

Apply AX-FLUMIOX to weed free onions (dry bulb) for preemergence control of the weeds listed in Table 1, Section A.

Table A. Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX

BROADLEAF WEED SPECIES					
Common Name	Scientific Name	Organic Matter	Soil Type	AX- FLUMIOX Rate	
Carpetweed	Mollugo verticillata	Up to 5%	All Soil	2oz/A	
Chickweeds			Types		
Common	Stellaria media				

Mouseear	Cerastium vulgatum	
Dandelion	Taraxacum officinale	
Eclipta	Eclipta prostrata	
Eveningprimrose, Cutleaf	Oenothera laciniata	
Florida Pusley	Richardia scabra	
Henbit	Lamium amplexicaule	
Lambsquarters, Common	Chenopodium album	
Little Mallow	Malva parviflora	
Marestail/Horseweed	Conyza canadensis	
Nightshades		
Black	Solarium nigrum	
Eastern Black	Solanum ptycanthum	
Hairy	Solarium sarrachoides	
Pigweeds		
Redroot	Amaranthus retroflexus	
Smooth	Amaranthus hybridus	
Spiny Amaranth	Amaranthus spinosus	
Tumble	Amaranthus albus	
Prickly Sida (Teaweed)	Sida spinosa	
Puncturevine	Tribulus terrestris	
Purslane, Common	Portulaca oleracea	
Radish, Wild	Raphanus raphanistrum	
Redmaids	Calandrinia ciliata var. menziessii	
Shepherd's-Purse	Capsella bursa-pastoris	
Smallflower Morningglory	Jacquemontia tamnifolia	
Spotted Spurge	Euphorbia maculata	
Venice Mallow	Hibiscus trionum	

# **DIRECTIONS FOR USE IN PEANUT[\*]**

[\*Not for Use in California]

#### **RESTRICTIONS**

- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** apply more than 2 ounces of AX-FLUMIOX per acre in the states of North Carolina, Oklahoma, or Virginia where climatic conditions may result in unacceptable injury to peanuts unless supplemental labeling provided by Axion Ag Products LLC is followed.
- DO NOT irrigate when peanuts are cracking.
- **DO NOT** graze treated fields or feed treated hay to livestock

Many weather related factors, including high wind, splashing or heavy rains or cool conditions at or near peanut emergence, may result in peanut injury in fields treated with AX-FLUMIOX. On occasion this has resulted in a delay in maturity or even a slight decrease in yield.

# WIND MANAGEMENT

In areas where shallow cultivation is used between rows to reduce wind-borne sand damage to peanuts, weed control from AX-FLUMIOX may be reduced.

#### **TIMING TO PEANUTS**

AX-FLUMIOX may be applied to peanuts prior to planting or preemergence (after planting). Preemergence applications of AX-FLUMIOX must be made within 2 days after planting and prior to peanut emergence. Application after the peanuts have begun to crack, or are emerged, will result in severe crop injury. Application must not be made when peanuts have begun to crack. Select AX-FLUMIOX rate from Table 1 according to anticipated weed spectrum.

#### **TIMING TO WEEDS**

### **Burndown - Preemergence to Peanuts, Postemergence to Weeds**

AX-FLUMIOX, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where peanuts will be planted directly into a stale seedbed, cover crop or in previous crop residues. Apply AX-FLUMIOX before planting, during planting or after planting, but before the crop emerges. For control of emerged weeds, tank mix AX-FLUMIOX with glyphosate. Refer to glyphosate label for specified rate and application pressure. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. AX-FLUMIOX tank mixes applied to assist in the control of emerged weeds must be applied with an adjuvant, including a non-ionic surfactant at 0.25% v/v or a crop oil concentrate or a methylated seed oil at 1 to 2 pints per acre. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to increase herbicidal activity.

Preemergence (conventional tillage) applications of AX-FLUMIOX must be applied prior to weed emergence.

### ADDITIONAL RESIDUAL GRASS CONTROL: SEQUENTIAL

AX-FLUMIOX may be applied sequentially following a preplant incorporated application of trifluralin (states of New Mexico, Oklahoma and Texas only), dimethenamid/ dimethenamid-p, ethalfluralin, metolachlor/S-metolachor or pendimethalin.

### ADDITIONAL RESIDUAL GRASS CONTROL: TANK MIXED

AX-FLUMIOX can be tank mixed with alachlor, metolachlor/S-metolachlor or dimethenamid/ dimethenamid-p for additional grass and broadleaf weed control. AX-FLUMIOX can also be tank mixed with pendimethalin or SONALAN ethalfluralin in states where they are labeled, provided overhead irrigation guidelines on the pendimethalin and/or ethalfluralin labels are followed.

# PREEMERGENCE APPLICATION IN PEANUTS IN THE STATES OF NORTH CAROLINA, OKLAHOMA, AND VIRGINIA ONLY

AX-FLUMIOX, at 2 ounces per acre, can be applied within 2 days of planting to control common ragweed, tropic croton and entireleaf, ivyleaf and tall/scarlet morningglories.

Cool temperatures near emergence, 2 consecutive nighttime lows in the 50's F, in combination with heavy rainfall may result in severe crop injury. AX-FLUMIOX, at 3 ounces per acre, must only be used in these states when other alternatives are not available for adequate control of the weeds listed above and the user acknowledges the risks associated with this use rate under the adverse environmental conditions listed above.

### **DIRECTIONS FOR USE IN POTATO**

[For Use in [Arizona,] [California,] [Colorado,] [Delaware,] [Florida,] [Hawaii,] [Idaho,] [Maryland,] [Minnesota,] [Montana,] [Nebraska,] [Nevada,] [New Jersey,] [New Mexico,] [North Carolina,] [North Dakota,] [Oregon,] [South Carolina,] [South Dakota,] [Texas,] [Utah,] [Virginia,] [Washington,] [Washington DC] [and] [Wyoming] only.]

# **RESTRICTIONS**

- **DO NOT** apply more than 1.5 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 1.5 ounces of AX-FLUMIOX per acre per year.
- DO NOT apply to Rill (Furrow) irrigated potatoes

Many weather related factors, including high wind, splashing or heavy rains or cool conditions at or near potato emergence, may result in potato injury in fields treated with AX-FLUMIOX. On occasion this has resulted in a delay in maturity.

#### **TIMING TO POTATOES**

AX-FLUMIOX may be applied to potatoes after hilling for the preemergence suppression of the weeds listed in Table 8. Apply AX-FLUMIOX with other labeled herbicides for broad spectrum weed control. A minimum of 2 inches of settled soil must cover the vegetative portion of the potato plant at the time of AX-FLUMIOX application. Application to potatoes with less than 2 inches of soil covering the vegetative portion of the potato may result in crop injury. In areas with historically higher amounts of rainfall during the time of preemergence herbicide applications, including the Red River Valley, Minnesota and North Dakota, the requirement for 2 inches of settled soil is critical to avoid crop injury. Mechanical incorporation of AX-FLUMIOX will result in decreased weed control and must be avoided. In areas with sprinkler irrigation, incorporate AX-FLUMIOX with 0.5 to 0.75 inches of irrigation, after application and before <u>any</u> sprouts are within 2 inches of the settled soil surface if a rainfall event has not yet occurred.

### **TIMING TO WEEDS**

### Preemergence - Soil Covered Potatoes, Preemergence To Weeds

Apply AX-FLUMIOX to soil covered potatoes for the preemergence suppression of the weeds listed in Table 8. Harrowing, cultivation or corrigating after AX-FLUMIOX application will reduce weed control.

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed.

Table 8. Weeds Suppressed by Residual Activity of AX-FLUMIOX at 1.5 oz/A

COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	AX-FLUMIOX RATE
Lambsquarters, Common	Chenopodium album	Up to 5%	1.5 oz/A
Mustard, Wild	Brassica kaber		
Nightshades			
Black	Solarium nigrum		
Eastern Black	Solanum ptycanthum		
Hairy	Solanum sarrachoides		
Pigweeds			
Palmer Amaranth	Amaranthus palmeri		
Redroot	Amaranthus retroflexus		
Smooth	Amaranthus hybridus		
Spiny Amaranth	Amaranthus spinosus		
Tumble	Amaranthus albus		
Prickly Lettuce	Lactuca serriola		
(China Lettuce)			
Radish, Wild	Raphanus raphanistrum		

# **DIRECTIONS FOR USE IN SOYBEAN[\*]**

[\*Not for Use in California]

# **RESTRICTIONS**

- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** tank mix AX-FLUMIOX with acetochlor, alachlor, flufenacet, metolachlor/S-metoalchlor or dimethenamid/dimethenamid-p within 14 days of planting soybeans, unless soybeans are planted under no-till or minimum tillage conditions on wheat stubble or no-till field corn stubble.
- **DO NOT** irrigate when soybeans are cracking.
- DO NOT graze treated fields or feed treated hay to livestock

#### **TIMING TO SOYBEANS**

AX-FLUMIOX may be applied to soybeans prior to planting or preemergence (after planting). Preemergence application of AX-FLUMIOX must be made within 3 days after planting and prior to soybean emergence. Application after the soybeans have begun to crack, or are emerged, will result in severe crop injury. **DO NOT** apply when soybeans have begun to crack. Select AX-FLUMIOX rate from Table 1 according to anticipated weed spectrum.

#### **TIMING TO WEEDS**

### Burndown - Preemergence to Soybeans, Postemergence to Weeds

AX-FLUMIOX, applied as part of a burndown program, may be used for residual weed control, as well as to assist in postemergence burndown of many annual and perennial weeds where soybeans will be planted directly into a stale seedbed, cover crop or in previous crop residues. For control of emerged weeds, choose the most appropriate tank mix partner from Table 9. Apply AX-FLUMIOX with ground equipment before planting, during planting or within 3 days after planting, **but before the crop emerges**. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Refer to tank mix partner's label for specified application pressure. All AX-FLUMIOX tank mixes applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 to 2 pints per acre or a non-ionic surfactant at 0.25% v/v.

# INCREASING SPEED OF GLYPHOSATE BURNDOWN ACTIVITY

AX-FLUMIOX, at rates as low as 1 ounce per acre, may be tank mixed with glyphosate to increase the speed of burndown activity compared to glyphosate applied alone. Residual weed control will not be provided at rates lower than 2 ounces per acre; however, suppression of the weeds in Table 2, may occur at AX-FLUMIOX rates as low as 1 ounce per acre.

#### **TANK MIXES**

AX-FLUMIOX may be tank mixed with the herbicides listed in Table 9 for increased burndown activity, additional residual broadleaf and/or additional grass control. Refer to tank mix partner's label for adjuvant specifications.

Table 9. Tank Mix Partners for Control of Emerged Weeds in Reduced Tillage Soybeans

Tank Mix Partner	Target Weeds <sup>1</sup>		
2,4-D LVE	Dandelion		
	Marestail		
	Giant Ragweed		
2,4-D + Dicamba	Dandelion		
	Marestail		
	Giant Ragweed		
Clethodim	Annual Grasses		
Glyphosate	General Burndown		
Imazaquin	Cocklebur		
	Common Sunflower		
Paraquat	Annual Grasses		
	Henbit		
1 Refer to tank mix product labels for specific use directions for control of emerged weeds present.			

#### ADDITIONAL RESIDUAL BROADLEAF CONTROL

AX-FLUMIOX can be tank mixed with cloransulam-methyl, flumetsulam, linuron, metribuzin, imazaquin, imazaquin + imazethapyr + pendimethalin or imazethapyr for additional broadleaf control.

#### ADDITIONAL RESIDUAL GRASS CONTROL

AX-FLUMIOX can be tank mixed with pendimethalin or clomazone for additional grass control. Tank mixes with flufenacet, metolachlor/S-metolachlor, dimethenamid/dimethenamid-p or alachlor, may result in severe injury to soybeans when application is followed by prolonged periods of cool wet weather and must not be used with AX-FLUMIOX, unless supplemental labeling, provided by Axion Ag Products LLC, is followed.

# ROUNDUP READY OR GLYPHOSATE RESISTANT PROGRAM

AX-FLUMIOX may be applied as part of a burndown program or preemergence in conventional tillage programs, at 2 to 3 ounces per acre to reduce early season weed competition from waterhemp, velvetleaf, nightshade and morningglories as well as other weeds listed in Tables 2 and 3 in Roundup Ready or glyphosate resistant programs. A sequential post emergence application of glyphosate will be required to control weeds not controlled by AX-FLUMIOX.

# **DIRECTIONS FOR USE IN STRAWBERRY**

### **RESTRICTIONS**

- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per year.
- AX-FLUMIOX, at 3 ounces per acre, can be applied to the soil a minimum of 30 days prior to transplanting strawberries provided the strawberries will be transplanted through a plastic mulch.
- AX-FLUMIOX at 3 ounces per acre can be applied to dormant (established or newly planted) strawberries for the preemergence control of the weeds listed in Table 1, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX.
- AX-FLUMIOX, at 3 ounces per acre, can be applied in strawberry row middles with a shielded or hooded sprayer for the preemergence control of the weeds listed in Table 1, Broadleaf Weeds Controlled by Residual Activity of AX-FLUMIOX

Application method	Minimum Time from Application to Harvest (PHI)	Use Rate per Acre Per Application (oz)	Use Rate Per Acre Per Year (oz)	Special Use Instructions
Pre-transplant	Not applicable	3	3	Apply a minimum of 30 days prior to transplanting and prior to plastic mulch being laid.  Apply as part of a tank mix to control emerged weeds.
Preemergence to dormant strawberries	Not applicable	3	3	Crop oil concentrate, at 1% v/v, or non-ionic surfactant, at 0.25% v/v, may be added to help control emerged broadleaf weeds.
Hooded or shielded sprayer application to row middles	DO NOT apply after fruit set	3	3	Apply only to row middles - DO NOT apply over strawberries. Apply prior to weed emergence. Crop spotting may occur if an adjuvant is added. Application after fruit set may result in spotting of fruit and should be avoided. DO NOT allow spray drift to come in contact with fruit or foliage

Table 10. Weeds Controlled by Preemergence Application of AX-FLUMIOX

BROADLEAF WEED SPECIES				
COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	AX- FLUMIOX RATE
Bristly Starbur	Acanthospermum hispidum	Up to 10% <sup>1</sup>	All Soil	Asparagus,
Carpetweed	Mollugo verticillata		Types <sup>2</sup>	Garlic, Hops
Chickweeds			71	6 oz/A
Common	Stellaria media			Sugarcane
Mouseear	Cerastium vulgatum			6 to 8 oz/A
Coffee Senna	Cassia occidentalis			
Dandelion	Taraxacum officinale			Bushberries,
Eclipta	Eclipta prostrata			Grapes, Nut
Eveningprimrose, Cutleaf	Oenothera laciniata			Trees
False Chamomile[*]	Tripleurospermum maritima			(Including
Filaree				Pistachio), Pome Fruit,
Redstem	Erodium cicutarium			Stone Fruit,
Whitestem	Erodium moschatum			and Non-
Fiddleneck, Coast[*]	Amsinckia menziesii			Bearing Fruit
Fleabane, Hairy	Conyza bonariensis			Dodning i ruit

Field Pennycress[*]	Thlaspi arvense		Trees
Florida Beggarweed	Desmodium tortuosum		6 to 12 oz/A <sup>2</sup>
Florida Pusley	Richardia scabra		0 10 12 02/11
Golden Crownbeard	Verbesina encelioides		
Groundsel, Common	Senecio vulgaris		
Hairy Indigo	Indigofera hirsuta		
	Sesbania exaltata		
Hemp Sesbania			
Henbit	Lamium amplexicaule		To Maintain
Jimsonweed	Datura stramonium		Bare Ground
Kochia	Kochia scoparia		on Non-Crop
Lambsquarters, Common	Chenopodium album		Areas of
Mallow	Makin in allesta		Farms,
Common	Malva neglecta		Orchards &
(Cheeseweed)	100		Vineyards
Little	Malva parviflora		6 to12 oz/A
Horseweed/Marestail	Conyza canadensis		
Mayweed/False	Matricaria maritima		
Chamomile[*]			
Morningglories	1, , , ,		
Entireleaf	Ipomoea hederacea var.		
	integriuscula		
lvyleaf	Ipomoea hederacea		
Red/Scarlet	Ipomoea coccinea		
Smallflower	Jacquemontia tamnifolia		
Tall	Ipomoea purpurea		
Mustards			
London Rocket[*]	Sisymbrium irio		
Tansey[*]	Desurainia pinnata		
Tumble	Sisymbrium altissimum		
Wild	Brassica kaber		
Nettle, Burning[*]	Urtica urens		
Nightshades			
Black	Solarium nigrum		
Eastern Black	Solarium ptycanthum		
Hairy	Solanum sarrachoides		
Pigweeds			
Palmer Amaranth	Amaranthus palmeri		
Redroot	Amaranthus retroflexus		
Smooth	Amaranthus hybridus		
Spiny Amaranth	Amaranthus spinosus		
Tumble	Amaranthus albus		
Prickly Lettuce	Lactuca serriola		
(China Lettuce)	Ladiada comola		
Prickly Sida (Teaweed)	Sida spinosa		
Puncturevine	Tribulus terrestris		
Purslane			
Common	Portulaca oleracea		
Horse[*]	Trianthema portulacastrum		
Radish, Wild	Raphanus raphanistrum		
Ragweed, Common	Ambrosia artemisiifolia		
Redmaids	Calandrinia ciliata var. menziessi.		
Redweed	Melochia corchorifolia		
Shepherd's-purse	Capsella bursa-pastoris		
Smellmelon[*]	Cucumis melo		
Sowthistle, Annual[*]	Sonchus oleraceus		
Spotted Spurge	Euphorbia maculate		
Spurred Anoda	Anoda cristata		
Thistle, Russian	Salsola iberica		
Tropic Croton	Croton glandulosus		

Venice Mallow	Hibiscus trionum
Waterhemps	
Common	Amaranthus rudis
Tall	Amaranthus tuberculatus
Wild Poinsettia	Euphorbia heterophylla
White Cockle[*]	Silene latifolia
Wormwood, Biennial	Artemisia biennis
Yellow Rocket[*]	Barbarea vulgaris

<sup>&</sup>lt;sup>1</sup> AX-FLUMIOX can be used on soils with greater than 10% organic matter; however, length of residual control may be shorter than on soils with lower organic matter content.

Table 10. Weeds Controlled by Preemergence Application of AX-FLUMIOX (continued)

COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	AX-FLUMIOX RATE
<b>GRASS WEED SPECIES</b>		Up to 10% <sup>1</sup>	All Soil	Asparagus,
Barnyardgrass	Echinochloa crus-galli		Types <sup>2</sup>	Garlic, Hops
Bluegrass, Annual	Poa annua			6 oz/A
Crabgrass				Sugarcane
Large	Digitaria sanquinalis			6 to 8 oz/A
Smooth	Digitaria ischaemum			Bushberries,
Foxtails				Grapes, Nut
Bristly	Setaria verticillata			Trees
Giant	Setaria faberi			(including
Green	Setaria viridis			Pistachio),
Yellow	Setaria glauca			Pome Fruit, Stone Fruit and
Goosegrass	Eleusine indica			Non-Bearing
Guineagrass	Panicum maximum			Fruit Trees
Johnsongrass, Seedling	Sorghum halepense			6 to 12 oz/A <sup>2</sup>
Lovegrass, California	Eragrostis diffusa			To Maintain
Panicum				Bare Ground
Fall	Panicum dichotomiflorum			on Non-Crop
Texas	Panicum texaum			Areas of
Ryegrass, Italian[*]	Lolium multiflorum			Farms,
Signalgrass, Broadleaf	Brachiaria platyphylla			Orchards &
				Vineyards
				6 to 12 oz/A

<sup>1</sup> AX-FLUMIOX can be used on soils with greater than 10%; however, length residual control may be shorter than on soils with lower organic matter content.

# **DIRECTIONS FOR USE IN SUGARCANE[\*]**

[\*Not for Use in California]

# **RESTRICTIONS**

- **DO NOT** apply more than 8 ounces of AX-FLUMIOX per acre per application.
- DO NOT make a sequential application within 14 days of the first application.
- DO NOT apply more than 12 ounces of AX-FLUMIOX per acre per year.
- DO NOT apply within 90 days of harvest.

<sup>&</sup>lt;sup>2</sup> Use a maximum AX-FLUMIOX rate of 6 ounces per acre per application on any soil that has a sand plus gravel content over 80% if bushes, trees or vines are under 3 years of age. [\*Not for use in California.]

<sup>2</sup> Use a maximum AX-FLUMIOX rate of 6 ounces per acre per application on soils with lower any soil that has a sand plus gravel content over 80% if used on bushes, trees or vines are under 3 years of age. [\*Not for use in California.]

#### **TIMING TO SUGARCANE**

AX-FLUMIOX may be applied from 2 weeks prior to planting to before the sugarcane emerges, post directed or at layby. Select the proper AX-FLUMIOX rate from Table 10 according to anticipated weed spectrum and soil organic matter content for preemergence applications. Select AX-FLUMIOX rate from Table 11 according to emerged weed spectrum and weed heights for post-directed and layby applications.

#### **TIMING TO WEEDS**

# **Burndown - Preemergence to Sugarcane, Postemergence to Weeds**

AX-FLUMIOX may be used for preemergence control, and to assist in postemergence burndown, of many annual broadleaf weeds in sugarcane. For control of emerged weeds, choose the most appropriate tank mix partner from Table 12. Apply AX-FLUMIOX **before the crop emerges**. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. All AX-FLUMIOX tank mixes applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 quart per acre or a non-ionic surfactant at 0.25% v/v. Some tank mix products, for example glyphosate, may be formulated with a suitable adjuvant and do not require additional adjuvant.

### Preemergence - Preemergence to Sugarcane, Preemergence to Weeds

AX-FLUMIOX may be used for preemergence control of many annual broadleaf and grassy weeds in sugarcane. Select rate based on anticipated weed spectrum and soil organic matter content from Table 10. Apply AX-FLUMIOX **before the crop emerges.** 

# Post-Directed - Postemergence to Sugarcane, Postemergence to Weeds

Post-directed applications must only be made to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height and has begun to joint. **DO NOT** make post-directed applications to "PINEAPPLE" varieties. Post-directed applications to "PINEAPPLE" varieties or to upright varieties that have not exceeded 24 inches in height and have not begun to joint, may result in unacceptable crop injury. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Post-directed applications of AX-FLUMIOX must include a crop oil concentrate or methylated seed oil at 1 quart per acre or a non-ionic surfactant at 0.25% v/v. Select the proper AX-FLUMIOX rate based on weed spectrum and weed height from Table 11.

# Layby - Postemergence to Sugarcane, Postemergence to Weeds

Layby applications can be made to upright and "PINEAPPLE" varieties after the sugarcane has exceeded 30 inches in height and the spray solution will not contact foliage above 6 inches from the base of the sugarcane. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Layby applications of AX-FLUMIOX must be applied with crop oil concentrate or methylated seed oil at 1 quart oer acre or a non-ionic surfactant at 0.25% v/v. Select the proper AX-FLUMIOX rate based on weed spectrum and weed height from Table 11.

Table 11. Broadleaf Weeds Controlled by Post-Directed or Layby Application of AX-FLUMIOX in Sugarcane

BROADLEAF WEED SPECIES		WEED HEIGHT (inches)		
COMMON NAME	SCIENTIFIC NAME	3 oz/A	4 oz/A	
Bindweed, Field <sup>1</sup>	Convolvulus arvensis	4	8	
Carpetweed	Mollugo verticillata	4	4	
Cocklebur, Common	Xanthium strumarium	4	4	
Florida Beggarweed	Desmodium tortuosum	2	2	
Hemp Sesbania	Sesbania exaltata	6	8	
Jimsonweed	Datura stramonium	4	4	
Lambsquarters, Common	Chenopodium album	4	4	
Morningglories				
Entireleaf	Ipomoea hederacea var. integriuscula	-	4	
lvyleaf	Ipomoea hederacea	4	4	
Pitted	Ipomoea lacunosa	4	6	
Red	Ipomoea coccinea	-	4	

Tall	Ipomoea purpurea	2	4
Mustard, Wild	Brassica kaber	6	6
Pigweeds			
Palmer Amaranth	Amaranthus palmeri	4	6
Redroot	Amaranthus retroflexus	4	6
Smooth	Amaranthus hybridus	4	6
Plaintain, Broadleaf	Plantago major	6	6
Prickly Sida	Sida spinosa	4	6
Purslanes			
Common	Portulaca oleracea	2	4
Rock	Calandrinia spp.	-	2
Ragweeds			
Common	Ambrosia artemisiifolia	2	2
Giant	Ambrosia trifida	4	4
Rice Flatsedge	Cyperus iria	2	4
Sicklepod	Senna obtusifolia	4	4
Smartweeds			
Ladysthumb	Polygonum persicaria	4	4
Pale	Polygonum lapathifolium	4	4
Pennsylvania	Polygonum pensylvanicum	4	4
Spotted Spurge	Euphorbia maculata	4	4
Velvetleaf	Abutilon theophrasti	4	6
Venice Mallow	Hibiscus trionum	2	2
Waterhemps			
Common	Amaranthus rudis	2	2
Tall	Amaranthus tuberculatus	2	2

<sup>1</sup> AX-FLUMIOX tank, mixes will only control the above ground portion of field bindweed. Repeated applications will be needed to control regrowth.

#### **TANK MIXES**

AX-FLUMIOX may be tank mixed with the herbicides listed in Table 12 for additional weed control in burndown, preemergence, post-directed and layby applications. Refer to tank mix partner's label for adjuvant specifications.

Table 12. Tank mixes with AX-FLUMIOX for Post-directed or Layby Use in Sugarcane

Tank Mix Partner <sup>1</sup>	Target Weeds	Burndown	Post-Directed <sup>2</sup>	Layby
2,4-D amine	Annual and Perennial Broadleaf Weeds	X		
Ametryn <sup>4</sup>	Annual Grasses		X	Х
Asulam <sup>3</sup>	Annual Grasses		X	Х
Atrazine	Pigweeds Cocklebur	X	X	Х
Dicamba	Annual and Perennial Broadleaf Weeds	X		
Glyphosate 5	Annual and Perennial Weeds	X		Х
Halosulfuron	Purple Nutsedge Yellow Nutsedge	X	X	Х
Metribuzin <sup>6</sup>	Broadleaf Panicum Goosegrass		X	Χ

<sup>1</sup> Refer to tank mix product labels for specific use directions for control of emerged weeds present not listed in Table 11.

<sup>2</sup> Make post-directed applications to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height. Post-directed applications to "PINEAPPLE" varieties or to upright varieties that are less than 24 inches in height may result in unacceptable crop injury.

<sup>3</sup> Apply to sugarcane at least 24 inches tall.

<sup>4</sup> Apply before weeds are greater than 6 inches tall.

- 5 Glyphosate applications must be made with a hooded sprayer. Sugarcane must be at least 3 feet tall. Contact with the sugarcane foliage by either the spray mixture or the treated weed foliage will result in sugarcane injury.
- 6 Refer to metribuzin label for restrictions based on soil type.

#### ADDITIONAL PREEMERGENCE BROADLEAF CONTROL

AX-FLUMIOX can be tank mixed with atrazine or diuron for additional preemergence broadleaf control.

### ADDITIONAL PREEMERGENCE GRASS CONTROL

AX-FLUMIOX can be tank mixed with PROWL (or other pendimethalin products) for additional preemergence grass control provided sugarcane has not emerged.

# DIRECTIONS FOR USE IN SUNFLOWER[\*] AND SAFFLOWER[\*]

[\*Not for Use in California]

# HARVEST AID RESTRICTIONS

- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 3 ounces of AX-FLUMIOX per acre per year.
- DO NOT harvest within 5 days of application

Desiccation from AX-FLUMIOX requires the addition of an agronomically approved adjuvant to the spray mixture. Use a methylated seed oil which contains at least 15% emulsifiers and 80% oil at 1 quart per acre. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or a 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to the spray mixture along with methylated seed oil to enhance desiccation. The addition of a nitrogen source does not replace the need for methylated seed oil. Tank mixing AX-FLUMIOX with glyphosate or paraquat will increas control of emerged weeds and aid in harvest for sufflowers. Tank mixing AX-FLUMIOX with glyphosate will increase control of emerged weeds and aid in harvest for safflower.

### TIMING TO SUNFLOWER AND SAFFLOWER

Apply AX-FLUMIOX at 1 5 to 2 ounces per acre when crop is mature (when seed is 35% moisture or less). For many varieties this is when the backs of the heads are turning yellow and the bracts are turning brown Sunflower and safflower can be harvested 5 days after application.

To ensure thorough coverage use 1.5 to 30 gallons of spray solution per acre and select nozzle type using Manufacturer's gallonage and pressure specifications for postemergence application.

# **DIRECTIONS FOR USE IN SWEET POTATO**

[For Use in [Arizona,] [California] [and] [Hawaii] Only]

#### **RESTRICTIONS**

- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 3 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** apply postemergence to sweet potatoes.
- DO NOT use greenhouse grown transplants.
- **DO NOT** use transplants harvested more that 2 days prior to transplanting.
- **DO NOT** use on any sweet potato variety other than "BEAUREGARD", unless user has tested AX-FLUMIOX on other variety and has found crop tolerance to be acceptable.
- DO NOT apply as a part of any tank mix, except with labeled rates of COMMAND, if tank mix is applied
  prior to transplanting.

# **TIMING TO SWEET POTATOES**

AX-FLUMIOX must be applied prior to transplanting sweet potatoes.

#### **TIMING TO WEEDS**

### **Preemergence To Weeds**

Apply AX-FLUMIOX to soil prior to transplanting sweet potato slips for the preemergence control of the weeds listed in Table 1.

# **DIRECTIONS FOR USE IN WHEAT[\*]**

[For use in the states of [DE,] [ID,] [KY,] [MD,] [MN,] [MT,] [NC,] [ND,] [NJ,] [OR,] [SC,] [SD,] [TN,] [VA] [MN,] [MN,] [MN,] [MN,] [ND,] [NJ,] [NJ,]

#### RESTRICTIONS

- DO NOT apply more than 2 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 2 ounces of AX-FLUMIOX per acre per year.

# PRE PLANT APPLICATIONS. PRE EMERGENCE WEED CONTROL RESTRICTIONS

- For pre plant weed control use only on no till or minimum tillage fields where the previous year's crop residue has not been incorporated into the soil.
- [Plant wheat no sooner than 7 days after AX-FLUMIOX application in the states of DE ID KY MD MN MT NC ND NJ OR SC SD TN VA or WA.]
- [Plant wheat no sooner than 14 days after AX-FLUMIOX application in the states of DE ID KY MD MN MT NC ND NJ OR SC SD TN VA or WA.]
- [DO NOT use on Durum wheat.]
- DO NOT irrigate between emergence and spike.
- Wheat must be planted a minimum of 1 deep.
- DO NOT graze until wheat has reached 5 inches in height.

#### **Burndown Use Directions**

AX-FLUMIOX applied as part of a burndown program at 2 ounces per acre may be used for residual weed control as well as to assist in postemergence burndown of many weeds where wheat will be planted directly into the residue of the previous crop. See Directions for Use in Fall Burndown Programs in Fields to be Planted to Barley, Field Pea, Flax, Lentil, Safflower, Sunflower, and Wheat for rates and timing of applications. For control of emerged weeds. AX-FLUMIOX must be applied with an appropriate burndown tank mix partner. To ensure thorough coverage, use a minimum of 15 gallons of spray solution per acre. Refer to tank mix partners label for specified application pressure and adjuvant systems.

# [POST PLANT. PRE EMERGENCE WEED CONTROL] RESTRICTIONS

- For post plant pre emergence weed control use only on no till or minimum tillage fields where the previous crop residue has not been incorporated into the soil.
- Apply AX-FLUMIOX up to 2 days after planting.
- [DO NOT use on Durum wheat.]
- DO NOT irrigate between emergence and spike.
- Wheat must be planted a minimum of 1 deep.
- DO NOT graze until wheat has reached 5 inches in height.

### **Use Directions**

AX-FLUMIOX applied at 2 pounces per acre may be used for residual weed control where wheat has been planted directly into the residue of the previous year. Application must be made no later than 2 days after planting]

# HARVEST AID RESTRICTIONS

• DO NOT harvest within 10 days of application.

#### **Use Directions**

AX-FLUMIOX applied at 2 ounces per acre for desiccation requires the addition of an agronomically approved adjuvant to the spray mixture. Use a methylated seed oil which contains at least 15% emulsifiers and 80% oil at 1 quart per acre. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 pounds per acre or a 28 to 32% nitrogen solution at 1 to 2 quarts per acre) may be added to the spray mixture along with methylated seed oil to enhance desiccation. The addition of a nitrogen source does not replace the need for methylated seed oil. Tank mixing AX-FLUMIOX with glyphosate will increase control of emerged weeds and aid in harvest.

To ensure thorough coverage use a minimum of 10 gallons spray solution per acre by ground application and a minimum of 5 gallons per acre by aerial application. Nozzle selection must meet manufacturer's gallonage and pressure specifications for postemergence application.

#### **TIMING TO WHEAT**

Apply AX-FLUMIOX at 1.5 to 2 ounces per acre after wheat reaches the hard dough stage and gram has no more than 30% moisture. Wheat can be harvested 10 days after application. Axion Ag Products LLC recommends tank mixing with glyphosate.

# DIRECTIONS FOR USE IN BUSHBERRIES, GRAPE, NUT TREES (INCLUDING PISTACHIO), OLIVE, POME FRUIT, POMEGRANATE, STONE FRUIT AND NON-BEARING FRUIT TREES

### **RESTRICTIONS**

- **DO NOT** apply more than 12 ounces of AX-FLUMIOX per acre per application.
- **DO NOT** apply more than 24 ounces of AX-FLUMIOX per acre per year, except Bushberries; for Bushberries **DO NOT** apply more than 12 ounces of AX-FLUMIOX per acre per year.
- **DO NOT** make a sequential application within 30 days of the first application, except nut trees, **DO NOT** make a sequential application within 60 days of the first application.
- Use a maximum AX-FLUMIOX rate of 6 ounces per acre per application on any soil that has a sand plus gravel content over 80% if bushes, trees or vines are less than 3 years of age. (Two applications of 6 ounces per acre in a 12 month period can still be made as long as there have been 60 days between applications).
- **DO NOT** apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.
- **DO NOT** apply within 300 yards of non-dormant pears.
- Raise mower height during all mowing to reduce dust. Dust created by mowing can drift onto desirable vegetation resulting in injury.
- **DO NOT** apply to powdery soils or soils that are susceptible to wind displacement unless irrigation can be applied immediately after application.
- [DO NOT mow treated areas between bud break and final harvest. Dust created by mowing may drift onto desirable vegetation resulting in injury.]
- Follow the most restrictive label limitations and precautions of the tank mix product(s) being used.
- Avoid direct or indirect spray contact to foliage and green bark (non-barked trunk and non-barked vines with the exception of undesirable suckers).

For bushberries, grape, nut trees (including pistachio), olive, pomegranate and non-bearing fruit trees, AX-FLUMIOX must be applied as a uniform broadcast application to the orchard or vineyard floor or as a uniform band directed at the base of the bush, trunk or vine. For pome fruit and stone fruit, AX-FLUMIOX can only be applied as a uniform band directed at the base of the trunk prior to "pink bud" in apple and "bud break" in stone fruit and pear. The preferred application timing for AX-FLUMIOX is in the fall to maximize the potential for rainfall to activate and set the herbicide. **DO NOT** apply over the top of crop or allow spray to come in contact with crop as a result of application or drift.

### **Preemergence Application**

Apply 6 to 12 ounces (0.188 to 0.38 lb. ai) of AX-FLUMIOX per broadcast acre as a preemergence application. Make preemergence (to weed emergence) applications of AX-FLUMIOX to a weed-free soil

surface. Preemergence applications of AX-FLUMIOX must be completed prior to weed emergence. Moisture is necessary to activate AX-FLUMIOX on soil for residual weed control. Dry weather following application of AX-FLUMIOX may reduce effectiveness. However, when adequate moisture is received after dry conditions, AX-FLUMIOX will control susceptible germinating weeds.

# **Postemergence Application**

Apply 6 to 12 ounces (0.188 to 0.38 lb ai) of AX-FLUMIOX per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 quart per acre crop oil concentrate). The addition of an adjuvant enhances AX-FLUMIOX activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of AX-FLUMIOX.

Refer to Table 10 for weeds controlled by the residual activity of AX-FLUMIOX. Tank mix AX-FLUMIOX with a labeled burndown herbicide for control of the emerged weeds listed in Table 13. Refer to tank mix partner's label for additional weed species and increased weed heights claimed. Refer to tank mix partner's label for additional restrictions, including minimum carrier volume and crops in which tank mix partner may be used. Burndown tank mix partners include glyphosate, paraquat, 2,4-D and glufosinate. **DO NOT** tank mix with glyphosate or 2,4-D containing products during the period after bloom through final harvest to ensure crop safety from drift.

Residual weed control will be reduced if vegetation prevents the AX-FLUMIOX from reaching the soil surface. If vegetation is heavy use a burndown herbicide with AX-FLUMIOX and make a sequential AX-FLUMIOX application prior to the emergence of new weeds.

### **Carrier Volume and Spray Pressure**

To ensure thorough coverage in burndown applications, use a minimum of 15 gallons of spray solution per acre. Use higher gallonage if dense vegetation or heavy crop residue is present.

Nozzle selection must meet manufacturer's gallonage and pressure specifications.

### **Banded Application**

Rates listed in Table 13 refer to a broadcast application covering the entire acre. When making a banded application, the rate must be reduced according to the following formula:

Amount needed per Acre	_	Band Width in Inches		Rate per Broadcast Acre
for Banded Application		Row Width in Inches	_ ^	Nate per broadcast Acre

#### **USE DIRECTIONS FOR BUSHBERRIES**

Bushberries: Aronia Berry, Black Currant, Blueberry (Highbush, Rabbit-eye and Lowbush), Buffalo Currant, Chilean Guava, Cranberry (Highbush), Elderberry, European Barberry, Gooseberry, Honeysuckle (edible), Huckleberry, Jostaberry, Juneberry, Lingonberry, Native Currant, Red Currant, Salal and Sea Buckthorn

- **DO NOT** use in the states of Idaho, Oregon or Washington except west of the Cascade Mountains in the following counties:
  - **Oregon**: Benton, Clackamas, Clatsop, Columbia, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Multnomah, Polk, Tillamook, Umatilla, Yamhill and Washington
  - **Washington**: Benton, Clallam, Clark, Cowlitz, Franklin, Grant, Grays Harbor, King, Jefferson, Kitsap, Lewis, Pacific, Pierce, Skagit, Snohomish, Thurston, Wahkiakum, Walla Walla and Whatcom
- **DO NOT** apply to Bushberries established less than 2 years unless they are protected from spray contact by nonporous wrap, grow tubes or waxed containers.
- **DO NOT** apply within 7 days of harvest.

#### **USE DIRECTIONS FOR GRAPES**

• DO NOT apply within 60 days of harvest.

- **DO NOT** apply to grapes established less than 2 years unless they are trellised at least 3 ft. from the soil surface or are protected from spray contact by non-porous wrap, grow tubes or waxed containers.
- DO NOT apply to grapes that are not trellised or staked unless they are free standing.
- Avoid direct or indirect spray contact to foliage and green bark (non-barked vines, with the exception of undesirable suckers).
- New plantings of "own-rooted varieties", for example Concord, must be planted so that all roots are a
  minimum 8 inches below the soil surface to be treated. In some situations, this may require hilling soil
  around newly planted vines so that the settled depth of the hill will be 4 to 5 inches above the vineyard
  floor.

# Juice, Raisin and Wine Grapes

DO NOT apply during the period after bud break through final harvest, unless using shielded application
equipment and applicator can ensure spray drift will not come in contact with crop fruit or foliage.
Shielded applications during this time period must not be made with glyphosate or products containing
glyphosate.

# **Table Grapes**

- AX-FLUMIOX may be applied during the period following final harvest up to bud break.
- DO NOT apply after bud break.

# USE DIRECTIONS FOR NUT TREES (INCLUDING PISTACHIO), OLIVE, POME FRUIT, POMEGRANATE. AND STONE FRUIT

Nut Trees: Almond, Beechnut, Betelnut, Black Walnut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Coconut, English Walnut, Filbert (Hazelnut), Ginkgo, Heartnut, Hickory Nut, Macadamia Nut, Oak, Pecan, Pili Nut, Pine Nut, Pistachio and Tropical Almond.

Pome Fruit: Apple, Crabapple, Loquat, Mayhaw, Pear, Pear (oriental) and Quince.

Stone Fruit: Apricot, Cherries (Sweet and Tart), Nectarine, Peach, Plum (Chickasaw, Damson, Japanese), Plumcot and Prune

- California only: For almonds and stone fruit in the counties of Merced, San Joaquin and Stanislaus, follow Directions for use in this label.
- For pome fruit and stone fruit, AX-FLUMIOX can only be applied as a uniform band directed at the base of the trunk prior to silver tip in apples and bud break in stone fruit.
- **DO NOT** apply to pears in the states of Oregon or Washington.
- For pome fruit and stone fruit **DO NOT** apply to row middles (area between berms)
- For nut trees (including Pistachio), olive, pomegranate apply after bud break through final harvest using shielded application equipment if the applicator can ensure the spray drift will not come into contact with non-target vegetation, crop fruit and/or foliage. Shielded application equipment is not required if the following application parameters are followed:
  - Application pressure (at boom) < 30 PSI.
  - Application speed < 5 MPH.
  - Applicator can ensure the spray drift will not come into contact with non-target vegetation, crop fruit and/or foliage.
- **DO NOT** apply within 60 days prior to harvest.
- **DO NOT** apply to trees established less than one year, unless protected from spray contact by non-porous wraps, grow tubes, paint or waxed containers.
- **DO NOT** use in the states of Oregon or Washington except in the following counties unless the additional restrictions listed below are followed:
- **Oregon**: Benton, Clackamas, Clatsop, Columbia, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Morrow, Multnomah, Polk, Tillamook, Umatilla, Yamhill and Washington

**Washington:** Clallam, Cowlitz, Grays Harbor, King, Jefferson, Kitsap, Lewis, Pacific, Pierce, Skagit, Snohomish, Thurston, Wahkiakum and Whatcom

- For apples east of the Cascade Mountains in Washington (counties not listed above), follow the restrictions above plus:
  - Apply between final harvest and January 1.
  - Apply only to apple blocks with an established (2 years or older) permanent cover crop that covers a minimum of 60% of the surface area in the block.

- Application must be incorporated with a minimum of one half inch of water within 48 hours after application.
- DO NOT apply to powdery soils or soils susceptible to wind displacement.
- Apply only to orchard berms.
- **DO NOT** mow the treated berm areas of the orchard.

### **USE DIRECTIONS FOR NON-BEARING FRUIT TREES**

Non-Bearing Avocado, Fig, Grapefruit, Lemon, Olive, Orange, Pomegranate and Tangerine

- **DO NOT** apply more than 12 ounces of AX-FLUMIOX per acre per application.
- DO NOT apply more than 24 ounces of AX-FLUMIOX per acre during a 12 month period.
- DO NOT harvest fruit from treated trees within one year of application.
- **DO NOT** apply to trees established less than one year, unless protected from spray contact by non-porous wraps, grow tubes or waxed containers.
- **DO NOT** apply during the period after flowering through leaf drop, unless using shielded application equipment and the applicator can ensure spray drift will not come in contact with the crop foliage.

Table 13. Weeds Controlled by Postermergence Activity of AX-FLUMIOX Tank Mixes

BROADLEAF WEED SPECIES					
COMMON NAME	SCIENTIFIC NAME	WEED HEIGHT/LENGTH (inches)	AX-FLUMIOX RATE		
Bindweed, Field <sup>1</sup>	Convolvulus arvensis	8	6 to 12 oz/A		
Carpetweed	Mollugo verticillata	4			
Chickweeds					
Common	Stellaria media	4			
Mouseear	Cerastium vulgatum	4			
Cocklebur, Common	Xanthium strumarium	4			
Eveningprimrose, Cutleaf <sup>2</sup>	Oenothera laciniata	12			
Filaree					
Broad leaf	Erodium botiys	4			
Redstem	Erodium cicutarium	4			
Florida Beggarweed	Desmodium tortuosum	2			
Hemp Sesbania	Sesbania exaltata	8			
Jimsonweed	Datura stramonium	4			
Lambsquarters, Common	Chenopodium album	4			
Morningglories					
Entireleaf	Ipomoea hederacea var. integriuscula	4			
lvyleaf	Ipomoea hederacea	4			
Pitted	Ipomoea lacunosa	6			
Red/Scarlet	ipomoea coccinea	4			
Tall	ipomoea purpurea	4			
Mustard, Wild	Brassica kaber	6			
Pigweeds					
Palmer Amaranth	Amaranthus palmeri	6			
Redroot	Amaranthus retroflexus	6			
Smooth	Amaranthus hybridus	6			
Plaintain, Broadleaf	Plantago major	6			
Prickly Sida (Teaweed)	Sida spinosa	6			
Purslanes	,				
Common	Portulaca oleracea	4			
Rock	Calandrinia spp.	2			

Ragweeds		
Common	Ambrosia artemisiifolia 2	
Giant	Ambrosia trifida	4
Rice Flatsedge	Cyperus iria	4
Sicklepod	Senna obtusifolia	4
Smartweeds		
Ladysthumb	Polygonum persicaria	4
Pale	Polygonum lapathifolium	4
Pennsylvania	Polygonum pensylvanicum	4
Spotted Spurge	Euphorbia maculata	4
Velvetleaf	Abutilon theophrasti	4
Venice Mallow	Hibiscus trionum	4
Waterhemps		
Common	Amaranthus rudis	2
Tall	Amaranthus tuberculatus	2

<sup>1</sup> AX-FLUMIOX will only provide control of the above ground portion of bindweed. Repeated applications will be needed to control regrowth.

### ADDITIONAL RESIDUAL WEED CONTROL

AX-FLUMIOX maybe tank mixed with oryzalin, simazine or diuron for additional residual weed control. Always read and follow label use directions for all products being used.

# USE DIRECTIONS ON ALMOND AND STONE FRUITE IN A DEFINED AREA OF MERCED, SAN JAQUIN AND STANISLAUS COUNTIES OF CALIFORNIA

The use of AX-FLUMIOX in soils common in parts of Merced, San Joaquin and Stanislaus counties in California is known to have resulted in injury to almonds under drought stress conditions. These soils are characterized by having been cut or filled, high sand content, low clay content and shallow profiles. The Defined Area can be seen on the Map or by the description that follows:

- Intersection of Highway 4 and Escalon-Bellota Road at Farmington in San Joaquin County;
- Directly South on Escalon-Bellota to the Santa Fe Avenue and railroad tracks at Escalon
- · Southeast on Santa Fe Avenue down to the Merced River;
- East following the Merced River to the Merced/Mariposa County line;
- Northwest following the Merced County line through the intersection of Merced and Stanislaus County line following the Stanislaus/Tuolumne County and Calaveras County line to Highway 4;
- West on Highway 4 back to the Farmington intersection of Escalon-Bellota Road.

<sup>2</sup> For acceptable control, cutleaf evening primrose must be 12 inches or less and in the rosette stage. Add crop oil concentrate, at 1 pint per acre, or non-ionic surfactant at 0.25% v/v, to glyphosate tank mixes for cutleaf evening primrose control, including glyphosate formulations that contain a built-in adjuvant system.



# DIRECTIONS FOR USE TO MAINTAIN BARE GROUND ON NON-CROP AREAS OF FARMS, ORCHARDS AND VINEYARDS

# RESTRICTIONS

- **DO NOT** apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.
- DO NOT apply to ditch banks.

AX-FLUMIOX, when used as directed, can be used on farms, orchards and vineyards for non-selective vegetation control to maintain bare ground on non-crop areas that must be kept weed free. Follow all applicable directions as outlined above under "USE INFORMATION".

AX-FLUMIOX offers residual and postemergence control of susceptible broadleaf and grass weeds as well as an additional mode of action to assist in the control of ALS (acetolactate synthase) resistant weeds. AX-FLUMIOX can be tank mixed with the herbicides listed in Table 14 for increased residual or postemergence control. The length of residual control is dependent on the rate applied as well as on rainfall and temperature conditions. Length of residual control will decrease as temperature and precipitation increase. AX-FLUMIOX rates of 6 to 12 ounces per acre are required to provide residual control of the weeds listed in Table 10.

### PREEMERGENCE APPLICATION

Apply 6 to 12 ounces (0.188 to 0.38 lb. ai) of AX-FLUMIOX per broadcast acre as a preemergence application. Make preemergence (to weed emergence) applications of AX-FLUMIOX to a weed-free soil surface. Preemergence applications of AX-FLUMIOX must be completed prior to weed emergence. Moisture is necessary to activate AX-FLUMIOX on soil for residual weed control. Dry weather following application of AX-FLUMIOX may reduce effectiveness. However, when adequate moisture is received after dry conditions, AX-FLUMIOX will control susceptible germinating weeds.

#### POSTEMERGENCE APPLICATION

Apply 6 to 12 ounces (0.188 to 0.38 lb. ai) of AX-FLUMIOX per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 quart per acre crop oil concentrate). The addition of an adjuvant enhances AX-FLUMIOX activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of AX-FLUMIOX. Emerged weeds are controlled postemergence with AX-FLUMIOX, however, translocation of AX-FLUMIOX within a weed is limited, and control is affected by spray coverage and by the addition of an adjuvant. The most effective postemergence weed control with AX-FLUMIOX occurs when applied in combination with a surfactant to weeds less than 2 inches in height. Use a tank mix partner in combination with AX-FLUMIOX for the postemergence control of weeds larger than 2 inches. Tank mix partners are listed in Table 14.

**IMPORTANT:** Completely read and follow the label of any potential tank mix partner with AX-FLUMIOX. When using tank mixtures, use conditions must be in accordance with the most restrictive of the label limitations and precautions on either herbicide label

Table 14. Tank Mix Combinations to Maintain Bare Ground on Non-Crop Areas

2,4-D Glufosinate	Glyphosate	Paraquat
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# STORAGE AND DISPOSAL

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

#### PESTICIDE STORAGE

Keep pesticide in original container. Store in a cool, dry, secure place. **DO NOT** put formulation or dilute spray solution into food or drink containers. **DO NOT** contaminate food or foodstuffs.

**DO NOT** store or transport near feed or food. Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night 1-877-250-9291.

# PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### **CONTAINER HANDLING**

[Nonrefillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or puncture and dispose of in a sanitary landfill.]

-or-

Note to EPA reviewer: if this product is shipped in containers greater than 50 lbs, the following container handling statement will be added to the label:

[Container statement for nonrefillable container with liner]

[Nonrefillable bag: DO NOT reuse or refill this bag. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into equipment. DO NOT reuse bag. Dispose of bag in a sanitary landfill or by incineration if allowed by State and local authorities. Offer for recycling if available. Liner: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into equipment. DO NOT reuse liner. Dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities.]

-or-

[Container statement for nonrefillable drum with liner]

[Nonrefillable container: DO NOT reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Liner: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into equipment. DO NOT reuse liner. Dispose of liner in a sanitary landfill or by incineration if allowed 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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