GROUP 14 HERBICIDE

TIGRIS™
FLUMIOXAZIN 51WDG

For use as labeled on Alfalfa, Artichoke, Asparagus, Brassica Vegetable (Head and Stem, Group 5-16), Bushberry (Subgroup 13-07B), Cactus (Prickly Pear), Caneberry (Subgroup 13-07A), Celery, Citrus (Group 10-10), Clover, Corn (Field), Cotton, Cucurbit Vegetable (Group 9), Flax, Fruiting Vegetable (Group 8-10), Garlic, Grape, Hops, Lentils, Melons (Transplanted), Olive, Onion (Dry Bulb, Subgroup 3-07A), Pea and Beans (Dried Shelled, Subgroup 6C), Peanut, Pepper (Beds), Peppermint and Spearmint Tops, Pome Fruit (Group 11-10), Pomegranate, Potato, Safflower, Soybean, Stone Fruit (Group 12-12), Strawberry, Sugarcane, Sunflower (Subgroup 20B), Sweet Potato, Tomato (Beds), Tree Nuts (Group 14-12), and Wheat.

Contains flumioxazin, the active ingredient used in Valor® SX and Chateau®.

ACTIVE INGREDIENT:	**(% by weight)**
Flumioxazin*	51.0%
OTHER INGREDIENTS	49.0%
TOTAL	100.0%

*2-[7-flouro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)- dione

Flumioxazin 51WDG is a water dispersible granule containing 51% active ingredient.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call your poison control center at **1-800-222-1222**.	

Flumioxazin 51WDG is not manufactured, or distributed by Valent U.S.A. Corporation, seller of Valor and Chateau.

EPA Reg. No.: 92647-30

TIGRIS™

Manufactured for: **Tigris, LLC**
P.O. Box 250
10025 Hwy. 264 Alternate
Middlesex, NC 27557

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & 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)

Applicators, and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes and socks.

For aerial application to sugarcane, mixer/loaders must also wear: coveralls, chemical resistant apron and chemical resistant boots.

For aerial application to artichoke; field peas; flax; lentils; safflower; sunflower and wheat, mixer/loaders must also wear: Wear a minimum of a NIOSH approved filtering face piece respirator with any N filter (TC-84A). You can also use other NIOSH approved particulate respirators that offer more protection, such as a half face of full face respirator with any filter or a powered air purifying respirator with an HE filter. For more information about these options, see www.epa.gov/pesticide-respirators.

For ground boom application to cactus (prickly pear); olive and pomegranate, mixer/loaders must also wear: Wear a minimum of a NIOSH approved filtering face piece respirator with any N filter (TC-84A). You can also use other NIOSH approved particulate respirators that offer more protection, such as a half face of full face respirator with any filter or a powered air purifying respirator with an HE filter. For more information about these options, see www.epa.gov/pesticide-respirators.

USER SAFETY REQUIREMENTS

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

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS:

This product is toxic to 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 or rinsate.

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 of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run-off could occur will minimize water run-off.

Physical or Chemical Hazards

DO NOT mix or allow coming in contact with oxidizing and reducing agents. A hazardous chemical reaction may occur.

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 LABEL 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 waterproof material, shoes plus socks.

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NON-AGRICULTURAL USE REQUIREMENTS

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

RESISTANCE MANAGEMENT

For resistance management, Flumioxazin 51WDG is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to Flumioxazin 51WDG 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.

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

- Rotate the use of Flumioxazin 51WDG or other Group 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures from a different group if such use is permitted; where information on resistance in target weeds 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 after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance- management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Tigris, LLC.

USE INFORMATION

Flumioxazin 51WDG uses:

- **Flumioxazin 51WDG** provides residual control of susceptible weeds.
- **Flumioxazin 51WDG** provides additional burndown activity when used as part of a burndown program.
- **Flumioxazin 51WDG** can be applied as part of a fall burndown program for control of susceptible winter annuals.
- **Flumioxazin 51WDG** can be applied with a hooded or shielded sprayer, as well as part of a layby application, in selected crops for postemergence weed control as well as residual control of susceptible weeds.
- **Flumioxazin 51WDG** 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.
- **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. Flumioxazin 51WDG, 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.**

Flumioxazin 51WDG Prime Rate Summary	
Ounces of Flumioxazin 51WDG Prime	**Pounds of Flumioxazin**
0.5	0.016
1	0.032
1.5	0.049
2	0.064
2.5	0.080
4	0.128
6	0.191
8	0.255
12	0.383
24	0.765

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.

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 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.
- **DO NOT** use spray equipment used to apply **Flumioxazin 51WDG Prime** to apply other materials to any crop foliage, unless the proper cleanout procedures are followed. See "**SPRAYER CLEAN-UP**" for more information.

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.
- Make post-directed and layby applications of Flumioxazin 51WDG only to healthy growing crops.
- 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 forconsidering all of these factors when making decisions. Where states have more stringent regulations, they must be observed.
- 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. Flumioxazin 51WDG, 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.

Do not use spray equipment used to apply Flumioxazin 51WDG 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 Flumioxazin 51WDG in soil for residual weed control. Dry weather following applications of Flumioxazin 51WDG may reduce effectiveness. However, when adequate moisture is received after dry con ditions, Flumioxazin 51WDG will control susceptible germinating weeds. Flumioxazin 51WDG 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 Flumioxazin 51WDG application, weed control may be improved by irrigation with at least ¼ inch of water. If emerged weeds are controlled by cultivation, residual weed control will be reduced.

Burndown Application

For best results, apply Flumioxazin 51WDG as part of a burndown program to actively growing weeds. Applying Flumioxazin 51WDG under conditions that **DO NOT** promote active weed growth will reduce herbicide effectiveness. **DO NOT** apply Flumioxazin 51WDG 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. Flumioxazin 51WDG 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

Flumioxazin 51WDG may only be applied to healthy crops labeled for postemergence use. **DO NOT** apply Flumioxazin 51WDG to crops that have been weakened by disease, drought, flooding, excessive fertilization, soil salts, previously applied pesticides, nematodes, insects or winter injury.

Rainfastness

Flumioxazin 51WDG is rainfast one hour after application. Applications must not be made if rain is expected within one hour of application or postemergence efficacy may be reduced.

Soil Characteristics

Application of Flumioxazin 51WDG 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 Flumioxazin 51WDG 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 gals. of spray solution per acre for conventional tillage applications. Nozzle selection must meet manufacturer's gallonage and pressure recommendations for preemergence herbicide application.

Burndown Application (Prior to Crop Emergence)

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

Postemergence Application (Emerged Crop)

Check use directions for specific crops in which Flumioxazin 51WDG 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 recommendations for postemergence herbicide application.

ADDITIVES

Burndown Application (Prior to Crop Emergence)

Postemergence control of weeds from Flumioxazin 51WDG tank mixes will require the addition of an agronomically approved adjuvant to the spray mixture. When an adjuvant is to be used with Flumioxazin 51WDG, Tigris, 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 Flumioxazin 51WDG as part of a burndown program. Some tank mix partners 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 Flumioxazin 51WDG. The addition of a crop oil concentrate or methylated seed oil may increase the burndown activity on certain weeds such as cutleaf evening primrose and Carolina geranium. Verify mixing compatibility qualities by a jar test.

A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 to 2 qts./A) 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.

JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND FLUMIOXAZIN 51WDG

When using Flumioxazin 51WDG and an adjuvant, such as in stale seed bed, layby, hooded/shielded or reduced tillage situations, perform a jar test before mixing commercial quantities of Flumioxazin 51WDG, when using Flumioxazin 51WDG for the first time, when using new adjuvants or when a new water source is being used.

1. Add 1 pt. 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 Flumioxazin 51WDG to the quart jar for every 3 oz. of Flumioxazin 51WDG per acre being applied (4 g if 12 oz./A is the desired Flumioxazin 51WDG rate), gently mix until product goes into suspension.
3. Add 60 ml (4 Tbsps. or 2 fl. oz.) 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 oz.) 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. If any of the following conditions are observed the choice of adjuvant must be questioned:
   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 Flumioxazin 51WDG, 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, (i.e., chlorimuron and 2,4-D respectively) 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 Flumioxazin 51WDG. If two or more products were tank mixed prior to Flumioxazin 51WDG application, follow the most restrictive cleanup procedure.

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 lbs. of spray grade ammonium sulfate per 100 gals. of spray solution.
3. To ensure a uniform spray mixture, pre-slurry the required amount of Flumioxazin 51WDG with water prior to addition to the spray tank. Use a minimum of 1 gal. of water per 10 oz. of Flumioxazin 51WDG.
4. While agitating, slowly add the pre-slurried Flumioxazin 51WDG to the spray tank. Ensure sufficient agitation to create a rippling or rolling action on the water surface.
5. If tank mixing Flumioxazin 51WDG 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 plied.**
8. Mix only the amount of spray solution that can be applied the day of mixing. Apply Flumioxazin 51WDG within 6 hours of mixing.

SPRAYER CLEANUP

Spray equipment, including mixing vessels and nurse tanks, must be cleaned each day following Flumioxazin 51WDG application. After Flumioxazin 51WDG 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 gallon 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 the 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 Flumioxazin 51WDG 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.

Thoroughly clean all spray equipment, including all tanks, hoses, booms, screens and nozzles, before it is used to apply postemergence pesticides. Equipment with Flumioxazin 51WDG residue remaining in the system may result in crop injury to the subsequently treated crop.

MANDATORY SPRAY DRIFT

Aerial Applications

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Ground Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 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 HEIGHT - Ground Boom

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

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

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.

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.

APPLICATION EQUIPMENT

Use only application equipment that is clean and in good repair. Uniformly space nozzles on boom and frequently check for accuracy.

BROADCAST APPLICATION

Apply Flumioxazin 51WDG, and Flumioxazin 51WDG 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 Flumioxazin 51WDG per acre. The rate of Flumioxazin 51WDG required per acre, when applied as a banded application, can be calculated with the following formula:

Amount Needed per Acre for Banded Application	=	$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}}$	X	Rate per Broadcast Acre

AERIAL APPLICATION

Spray drift away from the site of application may cause damage to non-target vegetation. To minimize drift, apply the largest droplet size consistent with uniform coverage and satisfactory weed control. To obtain satisfactory application and avoid drift, the following restrictions must be observed:

- **DO NOT** apply during low-level inversion conditions (including fog), when winds are gusty or under other conditions that favor drift. **DO NOT** spray when wind velocity is less than 2 mph or more than 10 mph.
- **DO NOT** apply this product by air within 40 ft. of non-target plants including non-target crops.
- **DO NOT** apply this product by air within 100 ft. of emerged cotton crops.
- **DO NOT** apply this product by air within 40 ft. of streams, wetlands, marshes, ponds, lakes and reservoirs.
- **Carrier Volume and Spray Pressure:** When used as part of a burndown weed control program, apply Flumioxazin 51WDG in 7 to 10 gals. of water per acre. Application at less than 7 gals. per acre may provide inadequate control. When used for preemergence weed control, apply Flumioxazin 51WDG in 5 to 10 gals. of water per acre. The higher gallonage applications generally afford more consistent weed control. **DO NOT** exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Nozzle Selection and Orientation:** Formation of very small drops may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray pressure. Use nozzles that produce flat or hollow cone spray patterns. Use non-drip type nozzles, such as diaphragm type nozzles, to avoid unwanted discharge of spray solution. The nozzles must be directed toward the rear of the aircraft, at an angle between 0 and 15° downward. **DO NOT** place nozzles on the outer 25% of the wings or rotors.
- **Adjuvants and Drift Control Additives:** Refer to tank mix partner's label for adjuvant recommendation. 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.

CHEMIGATION

Follow all label directions for crops regarding rates, timing of application, special instructions and precautions. Refer to the onion (dry bulb) and potatoes section of this label for chemigation instructions for these crops.

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 Flumioxazin 51WDG applied corresponds to the specified rate.

Apply Flumioxazin 51WDG in ½ to ¼ 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 system.

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

Chemigation Restrictions

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, shall shut the system down and make necessary adjustments should the need arise.
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.

Chemigation Restrictions (continued)

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, such as 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, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system 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 Precautions for Chemigation**".

APPLICATION WITH DRY BULK FERTILIZERS

Dry bulk fertilizer may be impregnated or coated with Flumioxazin 51WDG. Application of dry bulk fertilizer with Flumioxazin 51WDG provides weed control equal to, or slightly below, the same rate of Flumioxazin 51WDG applied in liquid carriers, due to better coverage with application via spray equipment. Follow label directions for Flumioxazin 51WDG 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.

Ammonium nitrate and/or limestone must not be used as the sole source of fertilizer, as the Flumioxazin 51WDG 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 Flumioxazin 51WDG mixture for sale.

Flumioxazin 51WDG must be premixed with water to form a slurry prior to impregnation on dry bulk fertilizer. For best results, use a minimum of 1 pt. of water for each 2 oz. of Flumioxazin 51WDG. Use a minimum of 6 pts. of the Flumioxazin 51WDG 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 Flumioxazin 51WDG required can be calculated with the following formula:

Ounces of Flumioxazin 51WDG per ton of fertilizer	=	Ounces of Flumioxazin 51WDG per acre	X	2000	÷	pounds of fertilizer per acre

Thoroughly clean dry fertilizer blending equipment after Flumioxazin 51WDG 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 Flumioxazin 51WDG. 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 Flumioxazin 51WDG 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 Flumioxazin 51WDG.**

Flumioxazin 51WDG RATES	CROPS	ROTATION INTERVALS
1 oz./A	Cotton (no-till or strip-till only)	14 days[1]
1.5 to 2 oz./A	Cotton (no-till or strip-till only)	21 days[1]
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 days[1]
	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[2]	4 months if soil is tilled prior to planting 8 months if no tillage is performed
	Lentil	6 months

Flumioxazin 51WDG RATES	CROPS	ROTATION INTERVALS
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 days[1]
	Cotton, Rice, Sunflower, Tobacco and Wheat	2 months[1]
	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 listed2	6 months if soil is tilled prior to planting 12 months if no tillage is performed
	Alfalfa, Canola, Clover, Oats, Potato, Sugar Beet and all other crops not listed[2]	4 months if soil is tilled prior to planting 8 months if no tillage is performed
	Lentil	7 months
	Raised beds only: Head and Stem Brassica except Cabbage	2 months (if the top 4 inches of the beds have been removed)
Up to 4 oz./A	Sugarcane	Immediately
	Alfalfa, Canola, Potato, Sugar Beet and all other crops not listed[2]	6 months if soil is tilled prior to planting 12 months if not tillage is performed
	Cotton, Field Corn, Peanut, Rice, Sorghum, Soybean, Sunflower, Tobacco and Wheat	4 months
	Cabbage, melon, pepper and tomato[3]	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[2] Trees can be transplanted 2 months after application of Flumioxazin 51WDG [4]	12 months if soil is tilled prior to planting 18 months if no tillage is performed

[1] At least one inch of rainfall/irrigation must occur between application and planting or crop injury may occur.
[2] Successful soil bioassay must be performed prior to planting these crops.
[3] Arizona, California and Hawaii only: For fallowbed application on transplanted cabbage, melon, pepper and tomato beds refer to directions for use found in this label.]
[4] Transplanted avocado, bushberries (including blueberry), caneberries, citrus fruit, fig, grape, nut trees, olive, pome fruit, pomegranate and stone fruit can be planted 2 months after a Flumioxazin 51WDG application of 2 to 12 oz./A

Table 1. Broadleaf Weeds Controlled by Residual Activity of Flumioxazin 51WDG Herbicide

BROADLEAF WEED SPECIES				
SECTION A				
COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	Flumioxazin 51WDG HERBICIDE RATE
Carpetweed	*Mollugo verticillata*	Up to 5%	All Soil Types	2 oz./A
Chickweeds				
Common	*Stellaria media*			
Mouseear	*Cerastium vulgatum*			
Dandelion	*Taraxacum officinale*			
Eclipta	*Eclipta prostrata*			
Eveningprimrose, Cutleaf	*Oenothera laciniata*			
Field Pennycress	*Thlaspi arvense*			

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Middlesex, NC 27557

Table 1. Broadleaf Weeds Controlled by Residual Activity of Flumioxazin 51WDG Herbicide (continued)

BROADLEAF WEED SPECIES				
SECTION A				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 51WDG HERBICIDE RATE**
Florida Pusley	*Richardia scabra*	Up to 5%	All Soil Types	2 oz./A
Henbit	*Lamium amplexicaule*			
Lambsquarters, Common	*Chenopodium album*			
Little Mallow	*Malva parviflora*			
Marestail/Horseweed	*Conyza canadensis*			
Mayweed/False Chamomile	*Matricaria maritima*			
Nightshades				
Black	*Solanum nigrum*			
Eastern Black	*Solanum ptycanthum*			
Hairy	*Solanum sarrachoides*			
Pigweeds				
Redroot	*Amaranthus retroflexus*			
Smooth	*Amaranthus hybridus*			
Spiny Amaranth	*Amaranthus spinosus*			
Tumble	*Amaranthus albus*			
Prickly Lettuce	*Lactuca serriola*			
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*			
Sowthistle, Prickly	*Sonchus asper*			
Spotted Spurge	*Euphorbia maculata*			
Venice Mallow	*Hibiscus trionum*			

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Table 1. Broadleaf Weeds Controlled by Residual Activity of Flumioxazin 51WDG Herbicide (continued)

SECTION B				
All weeds listed in Section A plus:				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 51WDG HERBICIDE RATE**
Coffee Senna	*Cassia occidentalis*	Up to 3%	All Soil Types	2 oz./A Cotton and Dry Bean 2.5 oz./A Field Corn and Soybean 3 oz./A Peanut and all other labeled crops
Common Ragweed[1]	*Ambrosia artemisiifolia*			
False Chamomile	*Tripleurospermum maritima*			
Florida Beggarweed	*Desmodium tortuosum*			
Golden Crownbeard	*Verbesina encelioides*			
Hairy Indigo	*Indigofera hirsuta*			
Hemp Sesbania	*Sesbania exaltata*	3 to 5%	Coarse and Medium Soils; (sandy loam, loamy sand, loamy, silt-loam, silt, sandy clay, sandy clay loam)	2 oz./A Cotton and Dry Bean 2.5 oz./A Field Corn and Soybean 3 oz./A Peanut and all other labeled crops
Jimsonweed	*Datura stramonium*			
Kochia	*Kochia scoparia*			
London Rocket	*Sisymbrium irio*			
Morningglories[3]				
Entireleaf	*Ipomoea hederacea var. integriuscula*			
Ivyleaf	*Ipomoea hederacea*			
Red/Scarlet	*Ipomoea coccinea*			
Tall	*Ipomoea purpurea*			
Mustard, Wild	*Brassica kaber*			
Palmer Amaranth	*Amaranthus palmeri*			
Spurred Anoda	*Anoda cristata*		Fine Soils: (silty clay, silty clay loam, clay, clay loam)	2 oz./A Cotton and Dry Bean 2 oz./A Field Corn, Peanut, Soybean and all other labeled crops
Tropic Croton	*Croton glandulosus*			
Waterhemps[1]				
Common	*Amaranthus rudis*			
Tall	*Amaranthus tuberculatus*			
Wild Poinsettia	*Euphorbia heterophylla*			
Yellow Rocket	*Barbarea vulgaris*			

[1] A postemergence herbicide, such as lactofen, or glyphosate (Roundup Ready® soybeans only) may be needed following a preemergence application of Flumioxazin 51WDG 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, use 3 oz./A of Flumioxazin 51WDG in peanuts, regardless of soil type and organic matter content, except in the states of North Carolina, Oklahoma and Virginia (refer to the DIRECTIONS FOR USE IN PEANUT section of this label). [Flumioxazin 51WDG will provide residual control of these weeds at 2 oz./A when applied under a cotton canopy.]

[3] Morningglory species are not adequately controlled on fine soils or soils with greater than 3% organic matter.

Table 2. Weeds Suppressed by Residual Activity of Flumioxazin 51WDG

SECTION B			
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*		

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 the States of Arizona, California and Hawaii Only]

RESTRICTIONS

- **DO NOT** apply 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.
- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre. **DO NOT** make more than one fall burndown and fallow seedbed application per year.
- **DO NOT** make more than one spring burndown application per year.

Fall Burndown and Fallow Seedbed Programs - For Use in the States of Arizona, California, and Hawaii Only.

Flumioxazin 51WDG [, at 2 to 4 oz./A,] 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 Flumioxazin 51WDG; Table 3, Weeds Controlled by Fall and Spring Pre-Plant Burndown Programs; and Table 7, Weeds Controlled by Residual Activity of Flumioxazin 51WDG.

If weeds have emerged at the time of application, use Flumioxazin 51WDG in combination with a labeled burndown herbicide. Flumioxazin 51WDG 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.

Manufactured for: **Tigris, LLC**
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Fall Burndown and Fallow Seedbed Programs - For Use in All Other States

Flumioxazin 51WDG [, at 2 to 4 oz./A,] 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 Flumioxazin 51WDG; Table 3, Weeds Controlled by Fall and Spring Pre-Plant Burndown Programs; and Table 7, Weeds Controlled by Residual Activity of Flumioxazin 51WDG.

If weeds have emerged at the time of application, use Flumioxazin 51WDG in combination with a labeled burndown herbicide. Application must be made no earlier than October 15th in Region 2 or November 15th in Region 1 or when soil temperature falls below 50°F at a 2" depth to maintain residual weed control into the spring (April 1st in Region 1 and May 1st in Region 2) or up until planting, whichever comes first. Flumioxazin 51WDG 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

Tank Mixtures

Weeds controlled by post-emergence or residual activity are listed in Table 3. Pre-plant burndown treatment tank mixes and rates are:

Herbicide	**Rate**
Program1*	
Flumioxazin 51WDG **Plus**	2 to 3 oz./A
glyphosate **Plus**	0.5 to 1.0 lb. a.i./A
2,4-D (2,4-D for use on pre-plant soybeans only) **Plus**	0.5 to 1.0 a.i./A
NIS + AMS	0.5% v/v + 17 lbs./100 gals. of water

or

Program2*	
Flumioxazin 51WDG **Plus**	2 to 3 oz./A
glyphosate **Plus**	0.5 to 1.0 lb. a.i./A
COC** or NIS + AMS	1pt/A or 0.5% v/v + 17 lbs./100 gals. of water

or

Program3*	
Flumioxazin 51WDG **Plus**	2 to 3 oz./A
2,4-D (2,4-D for use on pre-plant soybeans only) **Plus**	0.5 to 1.0 a.i./A
COC	1 pt./A

* The labeled rate of Dicamba can be added to Programs 1, 2, & 3 to assist in the control of emerged broadleaves. Refer to dicamba label for rotational restrictions.

**Crop oil concentrate has been found to increase glyphosate burndown of emerged cutleaf evening primrose and Carolina geranium.

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

WEEDS CONTROLLED[1]		POSTEMERGENCE			RESIDUAL
COMMON NAME	SCIENTIFIC NAME	Program 1	Program 2	Program 3	
		Weeds 3 Inches 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[2]	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[3]	Yes	Yes
Mallow, Common	*Malva neglecta*	Yes	Yes	No	Yes
Prickly Lettuce	*Lactuca serriola*	Yes	Yes	Yes	Yes
Wormwood, Biennial	*Artemisia biennis*	Yes	Yes	Yes	Yes
		Weeds 12 Inches or Less			
Canola, Volunteer	*Brassica napus*	Yes	Yes	Yes	Yes
Carolina Geranium	*Geranium carolinianum*	Yes	Yes	Yes	-
Eveningprimrose, Cutleaf[4]	*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 the labeled rate of 2,4-D LVE for control of emerged dandelion.
[3] Program 2 will not control emerged glyphosate resistant marestail/horseweed.
[4] Use Program 1 to control cutleaf eveningprimrose that are nearing 12 inches in height or are past the rosette stage.
Use Programs 2 or 3 to control cutleaf eveningprimrose that are 12 inches or less and in the rosette stage.

SPRING BURNDOWN PROGRAMS

Flumioxazin 51WDG 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 Flumioxazin 51WDG 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). Flumioxazin 51WDG cannot be applied after planting field corn.

Flumioxazin 51WDG can be used at 1 to 3 oz./A with labeled preplant burndown herbicides to enhance the speed of burndown and increase weed spectrum.

Flumioxazin 51WDG can be used at 1 to 3 oz./A in field corn, peanut and soybean burndown programs. See "**FIELD CORN**", "**PEANUT**", "**SOYBEAN**" sections for more information.

DIRECTIONS FOR USE IN FALL AND SPRING BURNDOWN PROGRAMS IN COTTON AND SUGARCANE

[For Use in the States of Arizona, California and Hawaii Only]

RESTRICTIONS

- **DO NOT** apply to frozen or snow-covered soil.
- **DO NOT** perform any tillage operation after application or residual weed control will be reduced.
- A minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between Flumioxazin 51WDG application and planting of conventionally tilled cotton.
- A minimum of 14 days must pass, and 1 inch of rainfall/irrigation must occur, between Flumioxazin 51WDG application and planting of no-till or strip-till cotton when a Flumioxazin 51WDG rate of 1 oz./A is used and 21 days when a Flumioxazin 51WDG rate of 1.5 to 2 oz./A is used. The field must contain the stubble from the previous crop.
- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre.
- **DO NOT** make more than one fall burndown application per year.
- **DO NOT** make more than one spring burndown application per year.

Flumioxazin 51WDG can be used at 1 to 2 oz./A with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum. Flumioxazin 51WDG 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 - For Use in the States of Arizona, California, and Hawaii Only.

Flumioxazin 51WDG, at 2 to 4 oz./A, 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 Flumioxazin 51WDG in combination with a labeled burndown herbicide. Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

Fall Burndown Programs - For use in all other states

Flumioxazin 51WDG at 2 to 4 oz./A, 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 Flumioxazin 51WDG in combination with a labeled burndown herbicide. Application must be made no earlier than October 15th in Region 2 or November 15th in Region 1 or when soil temperature falls below 50°F at a 2" depth to maintain residual weed control into the spring (April 1st in Region 1 and May 1st in Region 2) or up until planting, whichever comes first.

Flumioxazin 51WDG 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

Flumioxazin 51WDG, at 1 to 2 oz./A, 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, SUNFLOWER, TOBACCO AND WHEAT

(Preplant to Crop)

RESTRICTIONS

- **DO NOT** apply to frozen or snow-covered soil.
- **DO NOT** perform any tillage operation after application or residual weed control will be reduced.
- A minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between Flumioxazin 51WDG application and planting of rice, sorghum, sugarcane, sunflowers, tobacco or wheat. Refer to most restrictive label for minimum interval between application and planting.
- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre.
- **DO NOT** make more than one fall burndown application per year.
- **DO NOT** make more than one spring burndown application per year.

Flumioxazin 51 WDG can be used at 1 to 2 oz./A with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum. Observe all rotational intervals prior to planting as listed in the "**ROTATIONAL RESTRICTIONS**" table.

Fall Burndown Programs - For Use in the States of Arizona, California, and Hawaii Only

Flumioxazin 51 WDG 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). Abnormally warm winters may reduce the length of weed control observed in the spring.

Fall Burndown Programs - For use in all other states

Flumioxazin 51 WDG 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 15th in Region 2 or November 15th in Region 1 or when soil temperature falls below 50°F at a 2" 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

Flumioxazin 51 WDG 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.

Manufactured for: **Tigris, LLC**
P.O. Box 250
10025 Hwy. 264 Alternate
Middlesex, NC 27557

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)

RESTRICTIONS

- **DO NOT** apply to frozen or snow-covered soil.
- **DO NOT** perform any tillage operation after application or residual weed control will be reduced.
- Flumioxazin 51WDG 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 Flumioxazin 51WDG with any product containing a label prohibition against such mixing.
- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre.
- **DO NOT** make more than one fall burndown application per year.

Observe all rotational intervals prior to planting as listed in the "ROTATIONAL RESTRICTIONS" table.

Fall Burndown Programs – For Use in the States of Arizona, California, and Hawaii Only.

Flumioxazin 51WDG can be used [at 2 to 4 oz./A] 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 Flumioxazin 51WDG application.

Fall Burndown Programs – For use in all other states

Flumioxazin 51WDG can be used [at 2 to 4 oz./A] 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 Flumioxazin 51WDG application.

Tank Mixtures

Flumioxazin 51WDG can be mixed with 2,4-D and/or glyphosate formulations labeled for burndown programs (pre-plant to crop) in accordance with the most restrictive label limitations and precautions. 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.

DIRECTIONS FOR USE IN FALLOW LAND

RESTRICTIONS

- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.0128 lb. a.i.) per acre per single application.
- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre.
- **DO NOT** make more than one fall fallow field application per year.
- **DO NOT** make more than one spring fallow field application per year.

Flumioxazin 51WDG may be used as a preemergence fallow treatment. Weeds controlled by residual activity are listed in Table 1.

Fallow Land – For Use in the States of Arizona, California, and Hawaii Only

Flumioxazin 51WDG at 2 to 4 oz./A 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 Flumioxazin 51WDG in combination with a labeled fallow herbicide. Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

Fallow Land – For Use in All Other States

Flumioxazin 51WDG at 2 to 4 oz./Acan 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 Flumioxazin 51WDG in combination with a labeled fallow herbicide. Application must be made no earlier than October 15th in Region 2 or November 15th in Region 1 or when soil temperature falls below 50°F at a 2" depth to maintain residual weed control into the spring (April 1st in Region 1 and May 1st in Region 2). Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

Flumioxazin 51WDG at 1 to 4 oz./A can be used in spring in combination with labeled burndown herbicides to control emerged weeds and provide residual weed control.

DIRECTIONS FOR USE IN ESTABLISHED ALFALFA

RESTRICTIONS

- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre during a single application.
- **DO NOT** apply more than 8 oz. of Flumioxazin 51WDG (0.255 lb. a.i.) per acre per year.
- **DO NOT** make a sequential Flumioxazin 51WDG application within 60 days of the first Flumioxazin 51WDG application.
- **DO NOT** apply to alfalfa with greater than 6 inches of growth. Application will result in burning of treated leaves and stems.
- **DO NOT** apply within 25 days of harvest or grazing.
- 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 must be expected and accepted if Flumioxazin 51WDG is used with an adjuvant, a tank mix partner formulated as an emulsifiable concentrate (EC) or a tank mix partner formulated with an adjuvant.)
- **DO NOT** use on intended mixed alfalfa-grass stands.
- Application with paraquat can be used to burndown winter annuals prior to winter dormant period.

TIMING TO ALFALFA

Flumioxazin 51WDG 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 Flumioxazin 51WDG. 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 Flumioxazin 51WDG before alfalfa growth exceeds 6 inches in height for the preemergence control of weeds listed in Table 7, Weeds Controlled by Residual Activity of Flumioxazin 51WDG. Make applications as soon as possible after cutting and removing alfalfa to minimize injury to alfalfa growth.

Postemergence Dodder Suppression

Apply Flumioxazin 51WDG at 4 oz. per acre with an adjuvant for postemergence suppression of dodder. Tank mixes with imazethapyr, ammonium salt or imazamox will increase control.

DIRECTIONS FOR USE IN ARTICHOKE

RESTRICTIONS

- **DO NOT** apply more than 4 oz./A of Flumioxazin 51WDG (0.128 lb. a.i.) per acre during a single application on annual or perennial artichoke varieties after new planting.
- **DO NOT** apply more than 6 oz./A of Flumioxazin 51WDG (0.191 lb. a.i.) per acre during a single application on perennial artichoke varieties after cutback.
- **DO NOT** apply more than 6 oz. of Flumioxazin 51WDG (0.191 lb. a.i.) per acre per year.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per year.
- Application to artichoke foliage may result in unacceptable crop injury.

TIMING TO ARTICHOKE

Annual Varieties: Flumioxazin 51WDG may be applied to artichoke beds prior to transplanting. Application of Flumioxazin 51WDG must be made to the beds no later than 2 days prior to transplanting. Irrigation or rainfall after transplanting is necessary to activate Flumioxazin 51WDG. **DO NOT** irrigate the Flumioxazin 51WDG 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. Take care to minimize soil disturbance during transplanting, as preemergence weed control will decrease as soil disturbance increases.

Perennial Varieties: Flumioxazin 51WDG may be applied to artichokes after planting of crown pieces of "cut back" of mature plants. Applications of Flumioxazin 51WDG 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. Application may not be made when artichokes have begun to emerge (cracking).

TIMING TO WEEDS

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

Apply Flumioxazin 51WDG pre-plant to annual artichokes for preemergence control of the weeds. For perennial artichokes apply before cracking for preemergence control of weeds. Make application prior to weed emergence. A post-emergence herbicide may be necessary to control emerged weeds. Flumioxazin 51WDG may be applied to annual or perennial artichokes as specified above for preemergence control of weeds listed in Table 7.

DIRECTIONS FOR USE IN ESTABLISHED ASPARAGUS

RESTRICTIONS

- **DO NOT** apply more than 6 oz. of Flumioxazin 51WDG (0.191 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 6 oz. of Flumioxazin 51WDG (0.191 lb. a.i.) 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 Flumioxazin 51WDG application prior to fern emergence. Treated soil that is splashed onto the ferns may result in spotting.]

TIMING TO ASPARAGUS - Dormant

Flumioxazin 51WDG may be applied to dormant asparagus for preemergence control of the weeds listed in Table 10, Weeds Controlled by Preemergence Application of Flumioxazin 51WDG. Application to non-dormant asparagus will result in unacceptable crop injury. Make applications 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 Flumioxazin 51WDG 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 Flumioxazin 51WDG. 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

Flumioxazin 51WDG 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 Flumioxazin 51WDG with paraquat. Refer to paraquat label for specified rate and application parameters. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. Flumioxazin 51WDG 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 lbs./A or 28 to 32% nitrogen solution at 1 to 2 qts./A) may be added to increase herbicidal activity.

Burndown - After Last Harvest of Season, Postemergence to Weeds

Use Flumioxazin 51WDG 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 Flumioxazin 51WDG to dormant asparagus for the preemergence control of weeds listed in Table 10.

DIRECTIONS FOR USE IN BRASSICA HEAD AND STEM VEGETABLE GROUP 5-16

Includes: Broccoli; Brussels Sprouts; Cabbage; Cabbage, Chinese, napa; Cauliflower, cultivars, varieties, and/or hybrids of these.

FOR DISTRIBUTION AND USE ONLY WHERE THIRD PARTY INDEMNIFICATION IS IN EFFECT

ROW MIDDLES

RESTRICTIONS

- **DO NOT** make more than 2 applications of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply after crops are transplanted.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre during a single application. For Cabbage **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre during a single application.
- **DO NOT** apply more than 6 oz. of Flumioxazin 51WDG (0.191 lb. a.i.) per acre per year. For Cabbage, **DO NOT** apply more than 8 oz. of Flumioxazin 51WDG (0.255 lb. a.i.) per acre per year.
- Retreatment Interval (RTI): 7 days

PRECAUTIONS

- Flumioxazin 51WDG 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.
- All applications must be made with shielded or hooded equipment.
- Efficacy will be reduced if Flumioxazin 51WDG is applied to areas of standing water within the row middles.
- Injury can occur if soil particles treated with Flumioxazin 51WDG contact the crop.
- Irrigate treated field after application and prior to transplanting with minimum of ¼ inch of water if rainfall does not occur between application and transplanting.

TIMING TO CROP

Flumioxazin 51WDG may be applied at 3 oz. per acre (except cabbage may be applied at 4 oz./A) as a shielded or hooded application to row middles after plastic is laid up to transplanting or seeding. Transplanting or seeding can take place any time after spray has dried. Spray must be applied to the row middle and contact no more than approximately 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

Flumioxazin 51WDG provides preemergence residual control of the weeds listed in Table 7, 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 Flumioxazin 51WDG with paraquat, carfentrazone-ethyl, glyphosate, or other registered burndown herbicide. Refer to tank mix partner label for specified rates and application parameters.

DIRECTIONS FOR USE ON CACTUS (PRICKLY PEAR)

RESTRICTIONS

- **DO NOT** apply more than 12 oz. of Flumioxazin 51WDG (0.383 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 2 applications of Flumioxazin 51WDG per acre per year at the 6 oz./A (0.191 lb. a.i.) rate.
- **DO NOT** apply more than 12 oz. of Flumioxazin 51WDG (0.383 lb. a.i.) per acre during a 12 month period.
- Use a maximum Flumioxazin 51WDG rate of 6 oz./A (0.191 lb. a.i.) 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 oz./A 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** mow treated areas. Dust created by mowing may drift onto desirable vegetation resulting in injury.
- **DO NOT** apply within 60 days prior to harvest.
- Retreatment Interval (RTI): 7 days
- **DO NOT** apply to plants established less than one year.

PRECAUTIONS

• Raise mower height during all mowing to reduce dust. Dust created by mowing can 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.

Apply Flumioxazin 51WDG as a uniform broadcast application to the plantation floor or as a uniform band directed at the base of the cactus. The preferred application timing for Flumioxazin 51WDG 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 oz. (0.188 to 0.38 lb ai/A) of Flumioxazin 51WDG per broadcast acre as a preemergence application. Flumioxazin 51WDG applications must be made prior to weed emergence for control of weeds listed in Table 10, *Weeds Controlled by Preemergence Application of Flumioxazin 51WDG*. Make preemergence (to weed emergence) applications of Flumioxazin 51WDG to a weed-free soil surface. Preemergence application of Flumioxazin 51WDG must be completed prior to weed emergence. Moisture is necessary to activate Flumioxazin 51WDG on soil for residual weed control. Dry weather following application of Flumioxazin 51WDG may reduce effectiveness. However, when adequate moisture is received after dry conditions, Flumioxazin 51WDG will control susceptible germinating weeds.

Postemergence Application

Apply 6 to 12 oz. (0.188 to 0.38 lb ai/A) of Flumioxazin 51WDG per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 qt/A crop oil concentrate). The addition of an adjuvant enhances Flumioxazin 51WDG activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of Flumioxazin 51WDG.

Refer to Table 13 for weeds controlled by the residual activity of Flumioxazin 51WDG. Flumioxazin 51WDG may be tank mixed with a labeled burndown herbicide for control of the emerged weeds.

Residual weed control will be reduced if vegetation prevents the Flumioxazin 51WDG from reaching the soil surface. If vegetation is heavy, it is advised to use a burndown herbicide with Flumioxazin 51WDG and make a sequential Flumioxazin 51WDG 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 recommendations.

Banded Application

Rates listed in Table 13 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 CELERY

Flumioxazin 51WDG, when applied according to label use directions, will control the weeds listed in Table 1. This label makes no claims concerning control of other weed species.

RESTRICTIONS

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre during a pre-transplant application.
- In the state of California, use as a pre-transplant application only.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre during a post-transplant application.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) 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 Flumioxazin 51WDG at 3 oz/A prior to transplanting, or between 3 and 7 days following transplanting, for preemergence control of the weeds listed in Table 1.

TIMING TO WEEDS

Use Flumioxazin 51WDG prior to weed emergence for residual control.

TANK MIXTURES

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. Flumioxazin 51WDG, when applied according to label use directions, will control the weeds listed in Table 1, Broadleaf Weeds Controlled by Residual Activity of Flumioxazin 51WDG . This label makes no claims concerning control of other weed species.

DIRECTIONS FOR USE IN CLOVER

RESTRICTIONS

- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre per year.
- **DO NOT** apply within 25 days of harvest or grazing.
- **DO NOT** apply to clover with greater than 6 inches of growth. Application will result in burning of treated leaves and stems.
- **DO NOT** use on intended mixed clover-grass stands.

PRECAUTIONS

- Only apply with an adjuvant or tank mix with products formulated as an emulsifiable concentrate "EC" when targeting control of emerged weeds (except and accept crop may be burned and/or stunting when applying tank mixes of Flumioxazin 51WDG with an adjuvant).
- Application with paraquat can be used to burndown winter annuals prior to winter dormant period.
- Application to clover with greater than 6 inches of growth may result in unacceptable crop injury.

TIMING TO CLOVER

Flumioxazin 51WDG may be applied to established clover with a maximum amount of growth of 6 inches or less for the preemergence control of the weeds listed in Table 7. Established clover is defined as clover planted in the fall or spring which has gone through a first cutting/mowing.

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 clover growth and before 6 inches of growth.

TIMING TO WEEDS

Preemergence - Preemeergence to Weeds

Apply Flumioxazin 51WDG before clover growth exceeds 6 inches in height for the preemergence control of weeds listed in Table 7, Weeds Controlled by Residual Activity of Flumioxazin 51WDG. Make applications as soon as possible after cutting and removing clover to minimize injury to clover growth.

Postemergence Dodder Suppression

Apply Flumioxazin 51WDG at 4 oz. per acre with an adjuvant for postemergence suppression of dodder. Tank mixes with imazethapyr, ammonium salt or imazamox will increase control.

DIRECTIONS FOR USE IN COTTON

RESTRICTIONS

- **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre during a single application.
- **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre during a single application.
- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre per year.
- **DO NOT** make a sequential Flumioxazin 51WDG application within 30 days of the first Flumioxazin 51WDG application.
- **DO NOT** apply within 60 days of harvest.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE

Hooded, Shielded and Layby Application

For best results, apply Flumioxazin 51WDG to actively growing weeds within the growth stages indicated in this label. Applying Flumioxazin 51WDG under conditions that **DO NOT** promote active weed growth will reduce herbicide effectiveness. **DO NOT** apply Flumioxazin 51WDG 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. Flumioxazin 51WDG is most effective when applied under sunny conditions at temperatures above 65°F.

Flumioxazin 51WDG is rainfast one hour after application. Applications must not be made 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 Flumioxazin 51WDG through a hooded or shielded sprayer or at layby, at 2 oz/A, in combinations with MSMA or at 1 to 2 oz/A 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 Flumioxazin 51WDG. Weeds that are controlled through residual activity of Flumioxazin 51WDG are listed in Table 1. Weeds that are suppressed by residual activity of Flumioxazin 51WDG are listed in Table 2.

Table 4. Emerged Broadleaf Weeds Controlled by Hooded, Shielded and Layby Application of Flumioxazin 51WDG Tank Mixes With Glyphosate or MSMA in Cotton

BROADLEAF WEED SPECIES		WEED HEIGHT (inches) 2 oz./A
COMMON NAME	SCIENTIFIC NAME	
Bindweed, Field[1]	*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
Ivyleaf	*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
Redroot	*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

Table 4. Emerged Broadleaf Weeds Controlled by Hooded, Shielded and Layby Application of Flumioxazin 51WDG Tank Mixes With Glyphosate or MSMA in Cotton (continued)

BROADLEAF WEED SPECIES		WEED HEIGHT (inches) 2 oz./A
COMMON NAME	SCIENTIFIC NAME	
Spotted Spurge	*Euphorbia maculata*	4
Velvetleaf	*Abutilon theophrasti*	4
Venice Mallow	*Hibiscus trionum*	2
Waterhemps		
Common	*Amaranthus rudis*	2
Tall	*Amaranthus tuberculatus*	2

[1] Flumioxazin 51WDG tank mixes will control the above ground portion of field bindweed. Repeated applications will be needed to control regrowth.

CARRIER VOLUME AND SPRAY PRESSURE

Hooded, Shielded and Layby Application

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

ADDITIVES

Hooded, Shielded and Layby Application

Weed control from hooded, shielded or layby application of Flumioxazin 51WDG 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 Flumioxazin 51WDG tank mixes, with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume. Use only application equipment that is clean and in good repair. Nozzles must meet manufacturer's recommendations for spray pattern and placement on spray boom and must be checked frequently for accuracy.

TIMING TO COTTON

Hooded and Shielded Application

Flumioxazin 51WDG 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 Flumioxazin 51WDG 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 Flumioxazin 51WDG applications. Flumioxazin 51WDG application must be directed to the lower 2 inches of the cotton stem to avoid crop injury.

TIMING TO WEEDS

Flumioxazin 51WDG tank mix application must be made to weeds within the height range given in Table 4.

TANK MIXES

Flumioxazin 51WDG must be tank mixed with one of the herbicides listed in Table 5 for postemergence control of the weeds listed in Table 4.

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.

Table 5. Tank Mixes with Flumioxazin 51WDG for Hooded, Shielded and/or Layby Use in Cotton

TANK MIX PARTNER	TARGET WEEDS	HOODED AND SHIELDED	LAYBY
glyphosate	Perennial Grasses and Broadleaves	X	X[1]
MSMA	Annual Grasses,Yellow Nutsedge	X	X

[1] For use only in cotton with the Roundup Ready gene.

DIRECTIONS FOR USE IN CUCURBIT VEGETABLES

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

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 this product. On occasion, this has resulting in a delay in maturity.

Flumioxazin 51WDG, when applied according to label use directions, will control the weeds listed in Table 7, Weeds Controlled by Residual Activity of Flumioxazin 51WDG . This label makes no claims concerning control of other weed species.

FOR DISTRIBUTION AND USE ONLY WHERE THIRD PARTY INDEMNICATION IS IN EFFECT

ROW MIDDLES

RESTRICTIONS

- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre during a single application.
- **DO NOT** apply more than 8 oz. of Flumioxazin 51WDG (0.255 lb. a.i.) per acre per year.
- **DO NOT** use with an adjuvant.
- 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 Flumioxazin 51WDG residues.
- does not occur between application and transplanting.
- All applications must be made with hooded or shielded equipment.

PRECAUTIONS

- Grow plants on raised plastic mulched beds that are higher than the treated row middle.
- Drift of treated soil particles onto plants may cause contact injury.
- 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 Flumioxazin 51WDG residues.
- All applications must be made with hooded or shielded equipment.
- Irrigate treated field after application and prior to transplanting with minimum of ¼ inch of water if rainfall does not occur between application and transplanting.
- 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 this product. On occasion, this has resulting in a delay in maturity.

TIMING TO CUCURBIT VEGETABLES

Apply Flumioxazin 51WDG at 4 oz. 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 Flumioxazin 51WDG, as well as to assist in the postemergence control of emerged weeds. A second application of Flumioxazin 51WDG at 4 oz. 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

Flumioxazin 51WDG 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 Flumioxazin 51WDG 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 use directions.

TANK MIXTURES

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.

Manufactured for: **Tigris, LLC**
P.O. Box 250
10025 Hwy. 264 Alternate
Middlesex, NC 27557

DIRECTIONS FOR USE ON TRANSPLANTED MELON, PEPPER AND TOMATO BEDS

RESTRICTIONS

- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre per application.
- **DO NOT** make more than 2 applications of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 8 oz. of Flumioxazin 51WDG (0.255 lb. a.i.) per acre per year.
- Retreatment Interval (RTI): 60 days

Precaution:

- 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 Flumioxazin 51WDG. On occasion this has resulted in a delay in maturity.

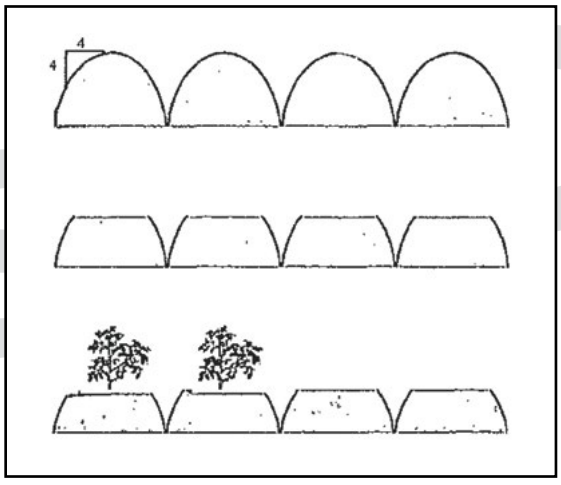
TIMING TO CROP

Flumioxazin 51WDG FALLOWBED USE PRIOR TO TRANSPLANTING

Flumioxazin 51WDG RATES	ADJUVANT	GPA	TRANSPLANTING INTERVAL
4 oz/A	Required by burndown tank mix partner	Ground - 20 to 40	2 Months
Application Method: Apply with a burndown herbicide labeled for the control of emerged weeds. Flumioxazin 51WDG, when used alone, will not provide satisfactory control of emerged weeds.			

USE RESTRICTIONS FOR PREEMERGENCE FALLOWBED WEED CONTROL PRIOR TO TRANSPLANTING

- Always read and follow all label directions when using any pesticide alone or in tank mix combinations.
- The top 4 inches of the bed, from a horizontal and vertical perspective, where the crop will be transplanted, must be removed prior to transplanting.
- Irrigate treated field after application and prior to transplanting with minimum of ¼ inch of water if rainfall does not occur between application and transplanting.
- Use only healthy transplants. **DO NOT** use on direct seeded crops.
- This use pattern makes no claim for in-season weed control after the beds have been disturbed.
- **DO NOT** apply when weather conditions favor spray drift.



Beds are formed and Flumioxazin 51WDG is applied with a burndown herbicide.

A minimum of 2 months after Flumioxazin 51WDG 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.

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 IN DRY BEANS AND WEED CONTROL IN CHICKPEAS (GARBANZO BEAN)

Restrictions:

- For chickpeas, **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre per application.
- For all other dry beans, **DO NOT** apply more than 1.5 oz. of Flumioxazin 51WDG (0.048 lb. a.i.) per acre per application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG Prime per acre per year.

Precaution:

- 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 Flumioxazin 51WDG Prime. On occasion this has resulted in a delay in maturity.

Manufactured for: **Tigris, LLC**
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Middlesex, NC 27557

TIMING TO DRY BEAN AND CHICKPEAS

Flumioxazin 51WDG may be applied to dry beans within 2 days after planting for the preemergence suppression of the weeds listed in Table 1, Broadleaf Weeds Controlled by Residual Activity of Flumioxazin 51WDG or Table 8, Weeds Suppressed by Residual Activity of Flumioxazin 51WDG. Flumioxazin 51WDG may be tank mixed with other labeled herbicides for broad spectrum weed control.

TIMING TO WEEDS

Flumioxazin 51WDG may be applied to dry beans prior to planting or preemergence (after planting). Preemergence application of Flumioxazin 51WDG must be made within 2 days after planting and prior to dry bean emergence. 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

Flumioxazin 51WDG can be tank mixed with pendimethalin for additional grass control. 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.

HARVEST AID

Restrictions:

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- **DO NOT** harvest within 5 days of application.

Desiccation from Flumioxazin 51WDG 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 lbs/A or a 28 to 32% nitrogen solution at 1 to 2 qts/A) 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 Flumioxazin 51WDG with glyphosate or paraquat will increase control or 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 AND CHICKPEAS

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 recommendations for postemergence application.

DIRECTIONS FOR USE IN FIELD CORN

RESTRICTIONS

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) 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

- Use only on no-till or minimum tillage fields where last years 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 oz./A 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 Flumioxazin 51WDG, at 2 to 3 oz./A, 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 Flumioxazin 51WDG.
- Apply Flumioxazin 51WDG at 2 oz./A 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 Flumioxazin 51WDG at 3 oz./A between 14 and 30 days prior to planting field corn.

Burndown Use Directions - For Preplant Applications in Field Corn

Flumioxazin 51WDG, 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, Flumioxazin 51WDG 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 recommended application pressure and recommended adjuvant systems.

INCREASING SPEED OF GLYPHOSATE BURNDOWN ACTIVITY

Flumioxazin 51WDG, at 1 oz./A, 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 oz./A; however, suppression of the weeds in Table 2 may occur at Flumioxazin 51WDG rates as low as 1 oz./A. Applications Flumioxazin 51WDG at 1 oz./A must be made a minimum of 14 days prior to planting field corn.

TANK MIXES

Flumioxazin 51WDG 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 recommendations. 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.

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

TANK MIX PARTNERS[1]	
2,4-D ethylhexyl ester	metribuzin
atrazine	paraquat
thifensulfuron + rimsulfuron	flumetsulam
dicamba	rimsulfuron
tribenuron-methyl	simazine
glyphosate	dicamba dimethylamine salt + 2,4-D dimethylamine salt
clopyralid + flumetsulam	

[1] Refer to tank mix product labels for specific 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 Flumioxazin 51WDG herbicide.

DIRECTIONS FOR USE IN FIELD PEAS

WEED CONTROL

Restrictions:

- **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre during a single application.
- **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre per year.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.

Precaution

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 Flumioxazin 51WDG. On occasion this has resulted in a delay in maturity.

TIMING TO FIELD PEAS

Flumioxazin 51WDG 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 Flumioxazin 51WDG or Table 8, Weeds Suppressed by Residual Activity of Flumioxazin 51WDG. Tank mix Flumioxazin 51WDG with other labeled herbicides for broad spectrum weed control.

TIMING TO WEEDS

Flumioxazin 51WDG may be applied to field peas prior to planting or preemergence (after planting). Preemergence application of Flumioxazin 51WDG 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

Flumioxazin 51WDG Prime can be tank mixed with pendimethalin for additional grass control. 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.

HARVEST AID

RESTRICTIONS

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- **DO NOT** harvest within 5 days of application.

Desiccation from Flumioxazin 51WDG 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 qt/A. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs/A or a 28 to 32% nitrogen solution at 1 to 2 qts/A) 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 Flumioxazin 51WDG with glyphosate will increase control of emerged weeds and aid in harvest.

TIMING TO FIELD PEAS

Apply Flumioxazin 51WDG at 1.5 to 2 oz./A, 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 Flumioxazin 51WDG 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 recommendations for postemergence application.

DIRECTIONS FOR USE IN FLAX

HARVEST AID

Restrictions:

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year at the 3 oz. (0.096 lb. a.i.) rate.
- **DO NOT** make more than 2 applications of Flumioxazin 51WDG per acre per year at the 1.5 oz. (0.048 lb. a.i.) rate.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- Retreatment Interval (RTI): 7 days
- **DO NOT** harvest within 5 days of application.

Desiccation from Flumioxazin 51WDG 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 qt./A. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 to 2 qts./A) 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 Flumioxazin 51WDG, at 1.5 to 2 oz./A, 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 recommendations for postemergence application.

DIRECTIONS FOR USE IN FRUITING VEGETABLES

Includes: African eggplant; Bush Tomato; Bell Pepper; Cocona; Currant Tomato; Eggplant, Garden; Huckleberry; Goji Berry; Groundcherry, Martynia; Naranilla; Okra, Pea Eggplant; Pepino; Nonbell Pepper; Roselle; Scarlet Eggplant; Sunberry; Tomatillo; Tomato; Tree Tomato; cultivars, varieties and/or hybrids of these.

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 this product. On occasion this has resulting in a delay in maturity.

FOR DISTRIBUTION AND USE ONLY WHERE THIRD PARTY INDEMNIFACATION IS IN EFFECT

ROW MIDDLES

Restrictions:

- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG Prime (0.128 lb. a.i.) per acre per application.
- **DO NOT** make more than 2 applications of Flumioxazin 51WDG Prime per acre per year.
- **DO NOT** apply more than 8 oz. of Flumioxazin 51WDG Prime (0.255 lb. a.i.) per acre per year.
- Retreatment Interval (RTI): 21 days

Precautions:

- 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 this product. On occasion this has resulting in a delay in maturity.
- Grow plants on raised or plastic mulched beds that are higher than the treated row middle.
- 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 even of ½ inch (natural or irrigation) must occur prior to transplanting to reduce Flumioxazin 51WDG Prime residues.
- Injury can occur if soil particles treated with this product contact the crop.
- Irrigate treated fields after application and prior to transplanting with minimum of ¼ 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 Flumioxazin 51WDG at 4 oz. 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 Flumioxazin 51WDG, as well as to assist in the postemergence control of emerged weeds. A second application of Flumioxazin 51WDG at 4 oz. 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

Flumioxazin 51WDG 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 Flumioxazin 51WDG with paraquat, carfentrazone-ethyl 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 use directions. 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.

DIRECTIONS FOR USE IN GARLIC

RESTRICTIONS

- **DO NOT** apply more than 6 oz. of Flumioxazin 51WDG (0.191 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 6 oz. of Flumioxazin 51WDG (0.191 lb. a.i.) per acre per year.

TIMING TO GARLIC

Flumioxazin 51WDG may be applied, at 6 oz./A, to garlic prior to garlic emergence. Apply within 3 days after planting garlic.

TIMING TO WEEDS

Preemergence - Preemergence to Weeds
Apply Flumioxazin 51WDG to weed free garlic for preemergence control of the weeds listed in Table 10.

DIRECTIONS FOR USE IN HOPS

Flumioxazin 51WDG Prime can be used in hops for pre-emergence weed control as well as sucker control. Flumioxazin 51WDG Prime, when applied according to label use directions, will control the weeds listed in Table 10. This label makes no claims concerning control of other weed species.

Restrictions:

- **DO NOT** apply more than 6 oz. of Flumioxazin 51WDG (0.191 lb. a.i.) per acre per application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG 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.

Flumioxazin 51WDG can be used in hops for preemergence weed control as well as sucker control.

TIMING TO HOPS FOR SUCKER CONTROL

Apply Flumioxazin 51WDG at 6 oz./A 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 Flumioxazin 51WDG at 6 oz./A 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 Flumioxazin 51WDG with a labeled burndown herbicide such as 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

Flumioxazin 51WDG applications must be made prior to weed emergence for control of weeds listed in Table 10.

TANK MIXTURES

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.

DIRECTIONS FOR USE IN LENTILS

HARVEST AID

RESTRICTIONS

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- **DO NOT** harvest within 5 days of application.

Desiccation from Flumioxazin 51WDG 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 qt./A. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 to 2 qts./A) 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 Flumioxazin 51WDG with glyphosate or paraquat will increase control of emerged weeds and aid in harvest. 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.

TIMING TO LENTILS

Apply Flumioxazin 51WDG, at 1.5 to 2 oz./A, 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 too early, a reduction in seed quality may occur. **DO NOT** spray Flumioxazin 51WDG 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 recommendations for postemergence application.

DIRECTIONS FOR USE IN MINT
(Peppermint and Spearmint)

Restrictions:

- **DO NOT** apply more than 4 oz. of Flumioxazin 51WDG (0.128 lb. a.i.) per acre per application.
- **DO NOT** make more than 2 applications of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 8 oz. of Flumioxazin 51WDG (0.255 lb. a.i.) per acre per year.
- Retreatment Interval (RTI): **DO NOT** make a sequential Flumioxazin 51WDG application within 60 days of the first Flumioxazin 51WDG 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.

Precautions:

- 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 Flumioxazin 51WDG.

To avoid crop injury:

- Application to stands established longer than 3 years may result in crop injury.
- Application to stands with weak, thin or damaged roots or rhizomes may result in crop injury.
- Application to mint in Southern Union County (south of Ladd Canyon) or Baker County in Oregon may result in unacceptable crop injury.
- Use only on established meadow mint.

Applications 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 may result in severe injury.

Apply only to healthy vigorous mint with undamaged rhizomes

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 Flumioxazin 51WDG.

Tank mixes with labeled rates of paraquat are advised to control emerged weeds and increase crop safety.

TIMING TO MINT

As a spray, Flumioxazin 51WDG 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, Flumioxazin 51WDG 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

Flumioxazin 51WDG 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 Flumioxazin 51WDG with paraquat. Refer to paraquat label for specified rate and application parameters. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. Flumioxazin 51WDG 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 lbs./A or 28 to 32% nitrogen solution at 1 to 2 qts./A) may be added to increase herbicidal activity.

Preemergence - Dormant Mint, Preemergence To Weeds

Apply Flumioxazin 51WDG to dormant mint for the preemergence control of weeds listed in Table 7. Fall application of Flumioxazin 51WDG, 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 such as groundsel. Fields plowed or harrowed after a Flumioxazin 51WDG application will result in less effective preemergence activity. In furrow irrigated fields, corrugating that is done after a Flumioxazin 51WDG application will expose untreated soil and break the herbicide barrier resulting in poor weed control.

TANK MIXTURES

Tank mixes with labeled rates of paraquat are advised to control emerged weeds and increase crop safety. 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

Table 7. Weeds Controlled by Residual Activity of Flumioxazin 51WDG

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 51WDG RATE**
Bristly Starbur	*Acanthospermum hispidum*	Up to 5%	All Soil Types	4 oz./A
Carpetweed	*Mollugo verticillata*			
Chickweeds				
Common	*Stellaria media*			
Mouseear	*Cerastium vulgatum*			
Coffee Senna	*Cassia occidentalis*			
Copperleaf, Hophornbeam	*Acalypha ostryifolia*			
Dandelion	*Taraxacum officinale*			
Dodder (suppression only)*	*Cuscuta* spp.			
Eclipta	*Eclipta prostrate*			
Eveningprimrose, Cutleaf	*Oenothera laciniata*			
False Chamomile[1]	*Tripleurospermum maritima*			
Fiddleneck, Coast[1]	*Amsinckia menziesii*			
Field Pennycress[1]	*Thlaspi arvense*			
Fleabane, Hairy[1]	*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[1]	*Sisymbrium irio*			
Marestail/Horseweed	*Conyza Canadensis*			
Mayweed/False Chamomile[1]	*Matricaria maritima*			
Morninglories				
Entireleaf	*Ipomoea hederacea var. integriuscula*			
Ivyleaf	*Ipomoea hederacea*			
Red/Scarlet	*Ipomoea coccinea*			
Smallflower	*Jacquemontia tamnifolia*			
Tall	*Ipomoea purpurea*			

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Table 7. Weeds Controlled by Residual Activity of Flumioxazin 51WDG (continued)

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 51WDG RATE**
Mustard		Up to 5%	All Soil Types	4 oz./A
Tansy	*Descurainia pinnata*			
Tumble	*Sisymbrium altissimum*			
Wild	*Brassica kaber*			
Nettle, Burning	*Urtica urens*			
Nightshades				
Black	*Solanum 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 (China Lettuce)	*Lactuca serriola*			
Prickly Sida (Teaweed)	*Sida spinosa*			
Sowthistle, Prickly[1]	*Sonchus asper*			
Puncturevine	*Tribulus terrestris*			
Purslane				
Common	*Portulaca oleracea*			
Horse	*Trianthema portulacastrum*			
Prickly Lettuce (China Lettuce)	*Lactuca serriola*			
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*			

Table 7. Weeds Controlled by Residual Activity of Flumioxazin 51WDG (continued)

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 51WDG RATE**
Smellmelon[1]	*Cucumis melo*	Up to 5%	All Soil Types	4 oz./A
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[1]	*Silene latifolia*			
Wild Poinsettia	*Euphorbia heterophylla*			
Wormwood, Biennial	*Artemisia biennis*			
Yellow Rocket[1]	*Barbarea vulgaris*			
GRASS WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 51WDG RATE**
Barnyardgrass	*Echinochloa crus-galli*	Up to 5%	All Soil Types	4 oz./A
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[1]	*Lolium multiflorum*			
Signalgrass, Broadleaf	*Brachiaria platyphylla*			

*__Flumioxazin 51WDG__ at 4 oz./A will provide post-emergence dodder suppression when applied in combination with imazethapyr, ammonium salt or imazamox at labeled rates. The use of imazethapyr, ammonium salt, and imazamox require the use of a NIS, which will result in burn and stunting of alfalfa. Growers must expect and accept this prior to using this tank mix.

[[1] Not for use in California.]

DIRECTIONS FOR USE IN ONION (DRY BULB)

Restrictions:

- **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre per application.
- **DO NOT** make more than 6 applications of Flumioxazin 51WDG per acre per year at the 0.5 oz. (0.016 lb. a.i.) rate.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- Retreatment Interval (RTI): **DO NOT** make sequential application within 14 days [(7 days for micro-rate application)].
- **DO NOT** apply more than 1 oz. of Flumioxazin 51WDG (0.032 lb. a.i.) per year on soils that contain greater than 90% sand plus gravel.
- **DO NOT** apply as part of a tank mix, other than with pendimethalin, or unacceptable injury may result. Other formulations of pendimethalin must not be tank mixed with Flumioxazin 51WDG for use in onions.
- **DO NOT** apply with any type of adjuvant.
- **DO NOT** apply within 45 days of harvest.

Use of Flumioxazin 51WDG may result in necrotic spotting of onion leaves that come in contact with the spray.

Micro-Rate Application

Sequential applications of Flumioxazin 51WDG may be applied to onions (dry bulb), between the 2- and 6-leaf stage, at rates of 0.5 to 1 oz./A, on a 7 day interval.

TIMING TO ONIONS (dry bulb)

Apply Flumioxazin 51WDG 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 Flumioxazin 51WDG to weed free onions (dry bulb) for preemergence control of the weeds listed in Table 1, Section A.

TANK MIXTURES

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.

CHEMIGATION

Flumioxazin 51WDG may be applied through sprinkler irrigation systems in onions (dry bulb).

DIRECTIONS FOR USE IN PEANUT

RESTRICTIONS

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- **DO NOT** irrigate when peanuts are cracking.
- **DO NOT** graze treated fields or feed treated hay to livestock.
- [In California, refer to the section "DIRECTIONS FOR USE IN FALL AND SPRING PREPLANT BURNDOWN AND FALLOW SEEDBED PROGRAMS IN FIELD CORN, PEANUT AND SOYBEAN" on this label.]
- [**DO NOT** apply more than 2 oz./A (0.064 lb. a.i.) in the states of North Carolina, Oklahoma or Virginia where climatic conditions may result in unacceptable injury to peanuts except as described in the **NORTH CAROLINA, OKLAHOMA AND VIRGINIA ONLY - PREEMERGENCE APPLICATION IN PEANUT** section below.]

PRECAUTIONS

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 Flumioxazin 51WDG. 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 Flumioxazin 51WDG may be reduced.

TIMING TO PEANUTS

Flumioxazin 51WDG may be applied to peanuts prior to planting or preemergence (after planting). Preemergence applications of Flumioxazin 51WDG 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 Flumioxazin 51WDG rate from Table 1 according to anticipated weed spectrum.

TIMING TO WEEDS

Burndown - Preemergence to Peanuts, Postemergence to Weeds

Flumioxazin 51WDG, 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 Flumioxazin 51WDG before planting, during planting or after planting, but before the crop emerges. For control of emerged weeds, tank mix Flumioxazin 51WDG with glyphosate. Refer to glyphosate label for specified rate and application pressure. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. Flumioxazin 51WDG tank mixes applied to assist in the control of emerged weeds must be applied with an adjuvant, such as a non-ionic surfactant at 0.25% v/v or a crop oil concentrate or a methylated seed oil at 1 to 2 pt./A. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs./A or 28 to 32% nitrogen solution at 1 to 2 qts./A) may be added to increase herbicidal activity.

Preemergence (conventional tillage) application of Flumioxazin 51WDG must be applied prior to weed emergence.

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ADDITIONAL RESIDUAL GRASS CONTROL: SEQUENTIAL

Flumioxazin 51WDG may be applied sequentially following a preplant incorporated application of trifluralin (states of New Mexico, Oklahoma and Texas only), ethalfluralin, metolachlor, pendimethalin or dimethenamid.

ADDITIONAL RESIDUAL GRASS CONTROL: TANK MIXED

Flumioxazin 51WDG can be tank mixed with alachlor, metolachlor or dimethanamid for additional grass and broadleaf weed control. Flumioxazin 51WDG can also be tank mixed with pendimethalin or ethalfluralin in states where they are labeled, provided overhead irrigation guidelines on the pendimethalin and/or ethalfluralin labels are followed.

NORTH CAROLINA, OKLAHOMA AND VIRGINIA ONLY - PREEMERGENCE APPLICATION IN PEANUT

DO NOT apply more than 2 oz./A in these states where climactic conditions may result in unacceptable injury to peanuts, except as described below.

Flumioxazin 51WDG, at 3 oz. 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. Use Flumioxazin 51WDG , at 3 oz./A, in these states when other alternatives are not available for adequate control of the weeds listed on this label 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 Only 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]

Restrictions:

- **DO NOT** apply more than 1.5 oz. of Flumioxazin 51WDG (0.048 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 1.5 oz. of Flumioxazin 51WDG (0.048 lb. a.i.) per acre per year.
- **DO NOT** apply to Rill (Furrow) irrigated potatoes.

Precaution

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 Flumioxazin 51WDG. On occasion this has resulted in a delay in maturity.

TIMING TO POTATOES

Flumioxazin 51WDG may be applied to potatoes after h illing for the preemergence suppression of the weeds listed in Table 8. Flumioxazin 51WDG may be tank mixed 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 Flumioxazin 51WDG 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, such as 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 Flumioxazin 51WDG will result in decreased weed control and must be avoided. In areas with sprinkler irrigation, incorporate Flumioxazin 51WDG with 0.25 to 0.75 inches of irrigation, after application and before any 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 Flumioxazin 51WDG to soil covered potatoes for the preemergence suppression of the weeds listed in Table 8. Harrowing, cultivation or corrugating after Flumioxazin 51WDG application will reduce weed control.

TANK MIXTURES

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.

CHEMIGATION

Flumioxazin 51WDG may be applied through sprinkler irrigation systems in potatoes.

Table 8. Weeds Suppressed by Residual Activity of Flumioxazin 51WDG at 1.5 oz/A

COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	Flumioxazin 51WDG HERBICIDE RATE
Lambsquarters, Common	*Chenopodium album*	Up to 5%	1.5 oz./A
Mustard, Wild	*Brassica kaber*		
Nightshades			
Black	*Solanum 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 (China Lettuce)	*Lactuca serriola*		
Radish, Wild	*Raphanus raphanistrum*		

DIRECTIONS FOR USE IN SOYBEAN

Restrictions:

- **DO NOT** apply more than 3 oz of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** graze treated fields or feed treated hay to livestock for 21 days following application of this product.
- **DO NOT** tank mix Flumioxazin 51WDG with flufenacet, metolachlor or dimethenamid 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.
- In California, refer to the section DIRECTIONS FOR USE IN FALL AND SPRING PREPLANT BURNDOWN AND FALLOW SEEDBED PROGRAMS IN FIELD CORN, PEANUT AND SOYBEAN in this label.

TIMING TO SOYBEANS

Flumioxazin 51WDG may be applied to soybeans prior to planting or preemergence (after planting). Preemergence application of Flumioxazin 51WDG 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. Application must not be made when soybeans have begun to crack. Select Flumioxazin 51WDG rate from Table 1 according to anticipated weed spectrum.

TIMING TO WEEDS

Burndown - Preemergence to Soybeans, Postemergence to Weeds

Flumioxazin 51WDG , 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 Flumioxazin 51WDG 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 gals. of spray solution per acre. Refer to tank mix partner's label for recommended application pressure. All Flumioxazin 51WDG 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 pt./A or a non-ionic surfactant at 0.25% v/v.

INCREASING SPEED OF GLYPHOSATE BURNDOWN ACTIVITY

Flumioxazin 51WDG, at rates as low as 1 oz./A, 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 oz./A; however, suppression of the weeds in Table 2, may occur at Flumioxazin 51WDG rates as low as 1 oz./A.

TANK MIXES

Flumioxazin 51WDG Prime 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 directions. 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.

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

TANK MIX PARTNER	TARGET WEEDS[1]
2,4-D ethylhexyl ester	Marestail Giant Ragweed Dandelion
paraquat	Annual Grasses Henbit
glyphosate	General Burndown
clethodim	Annual Grasses
mazaquin	Cocklebur Common Sunflower
dicamba dimethylamine salt + 2,4-D dimethylamine salt	Marestail Giant Ragweed Dandelion

[1] Refer to tank mix product labels for specific directions for control of emerged weeds present.

ADDITIONAL RESIDUAL BROADLEAF CONTROL

Flumioxazin 51WDG can be tank mixed with metribuzin, cloransulam-methyl, linuron, imazethapyr, flumetsulam, or imazaquin for additional broadleaf control.

ADDITIONAL RESIDUAL GRASS CONTROL

Flumioxazin 51WDG can be tank mixed with pendimethalin or clomazone for additional grass control. In the states of Alabama, Arkansas, Delaware, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia, Flumioxazin 51WDG can be tank mixed with micro-encapsulated acetochlor at 2 oz. per acre. Tank mixes with flufenacet, metolachlor or dimethenamid may result in severe injury to soybeans when application is followed by prolong periods of cool wet weather and must not be used with Flumioxazin 51WDG.

ROUNDUP READY PROGRAM

Flumioxazin 51WDG may be applied as part of a burndown program or preemergence in conventional tillage programs, at 2 to 3 oz./A 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 programs. A sequential post emergence application of glyphosate will be required to control weeds not controlled by Flumioxazin 51WDG.

DIRECTIONS FOR USE IN STRAWBERRY

Restrictions:

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.

Precautions:

- Flumioxazin 51WDG, at 3 oz. 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.
- Flumioxazin 51WDG at 3 oz. per acre can be applied to dormant (established or newly planted) strawberries for the preemergence control of the weeds listed in Table 1.
- Flumioxazin 51WDG, at 3 oz. 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.

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. **Avoid application after fruit set as this may result in spotting of fruit.** **DO NOT** allow spray drift to come in contact with fruit or foliage.

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Table 10. Weeds Controlled by Preemergence Application of Flumioxazin 51WDG

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 51WDG RATE**
Bristly Starbur	*Acanthospermum hispidum*	Up to 10%[1]	All Soil Types[2]	6 oz./A Asparagus, Caneberries Garlic, and Hops 6 to 8 oz./A Sugarcane 6 to 12 oz./A2 Bushberries, Cactus, Citrus Fruit, Grapes, Olive, Pome Fruit, Pomegranate, Stone Fruit, Tree Nuts, and Non-Bearing Fruit Trees 6 to 12 oz./A To Maintain Bare Ground on Non-Crop Areas of Farms, Orchards and Vineyards
Carpetweed	*Mollugo verticillata*			
Chickweeds				
Common	*Stellaria media*			
Mouseear	*Cerastium vulgatum*			
Coffee Senna	*Cassia occidentalis*			
Dandelion	*Taraxacum officinale*			
Eclipta	*Eclipta prostrata*			
Eveningprimrose, Cutleaf	*Oenothera laciniata*			
False Chamomile	*Tripleurospermum maritima*			
Filaree				
Redstem	*Erodium cicutarium*			
Whitestem	*Erodium moschatum*			
Fiddleneck, Coast	*Amsinckia menziesii*			
Fleabane, Hairy	*Conyza bonariensis*			
Field Pennycress	*Thlaspi arvense*			
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*			
Mallow				
Common (Cheeseweed)	*Malva neglecta*			
Little				
Horseweed/Marestail	*Conyza canadensis*			
Mayweed/False Chamomile	*Matricaria maritima*			
Morningglories				
Entireleaf	*Ipomoea hederacea var. integriuscula*			
Ivyleaf				
Red/Scarlet	*Ipomoea coccinea*			
Smallflower	*Jacquemontia tamnifolia*			
Tall	*Ipomoea purpurea*			

[1] Flumioxazin 51WDG 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.
2 Use a maximum Flumioxazin 51WDG herbicide rate of 6 oz./A 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.

Table 10. Weeds Controlled by Preemergence Application of Flumioxazin 51WDG Herbicide (continued)

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 51WDG RATE**
Mustards		Up to 10%[1]	All Soil Types[2]	6 oz./A Asparagus, Caneberries Garlic, and Hops 6 to 8 oz./A Sugarcane 6 to 12 oz./A2 Bushberries, Cactus, Citrus Fruit, Grapes, Olive, Pome Fruit, Pomegranate, Stone Fruit, Tree Nuts, and Non-Bearing Fruit Trees 6 to 12 oz./A To Maintain Bare Ground on Non-Crop Areas of Farms, Orchards and Vineyards
London Rocket	*Sisymbrium irio*			
Tansey	*Desurainia pinnata*			
Tumble	*Sisymbrium altissimum*			
Wild	*Brassica kaber*			
Nettle, Burning	*Urtica urens*			
Nightshades				
Black	*Solanum nigrum*			
Eastern Black	*Solanum ptycanthum*			
Hairy	*Solanum sarrachoides*			
Pigweeds				
Palmer Amaranth	*Amaranthus palmeri*			
Redroot	*Amaranthus retroflexus*			
Smooth	*Amaranthus hybridus*			
Spiny Amaranth	*Amaranthus spinosus*			
T umble	*Amaranthus albus*			
Prickly Lettuce (China Lettuce)	*Lactuca serriola*			
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 menziessii*			
Redweed	*Melochia corchorifolia*			
Shepherd's-purse	*Capsella bursa-pastoris*			
Smellmelon	*Cucumis melo*			
Sowthistle, Annual3	*Sonchus oleraceus*			
Spotted Spurge	*Euphorbia maculata*			
Spurred Anoda	*Anoda cristata*			
Thistle, Russian	*Salsola iberica*			
Tropic Croton	*Croton glandulosus*			
Venice Mallow	*Hibiscus trionum*			
Waterhemps				
Common	*Amaranthus rudis*			
Tall	*Amaranthus tuberculatus*			

[1] Flumioxazin 51WDG 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.
2 Use a maximum Flumioxazin 51WDG herbicide rate of 6 oz./A 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.
[3] Except CA.

Table 10. Weeds Controlled by Preemergence Application of Flumioxazin 51WDG Herbicide (continued)

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 51WDG RATE**
Wild Poinsettia	*Silene latifolia*	Up to 10%[1]	All Soil Types[2]	
White Cockle	*Artemisia beinnis*			
Wormwood, Biennial	*Barbarea vulgaris*			
Yellow Rocket	*Sisymbrium altissimum*			
GRASS WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 51WDG RATE**
Barnyardgrass	*Echinochloa crus-galli*	Up to 10%[1]	All Soil Types[2]	6 oz./A Asparagus, Caneberries, Garlic, and Hops 6 to 8 oz./A Sugarcane 6 to 12 oz./A2 Bushberries, Cactus, Citrus Fruit, Grapes, Olive, Pome Fruit, Pomegranate, Stone Fruit, Tree Nuts, and Non-Bearing Fruit Trees 6 to 12 oz./A To Maintain Bare Ground on Non-Crop Areas of Farms, Orchards and Vineyards
Bluegrass, Annual	*Poa annua*			
Crabgrass				
Large	*Digitaria sanquinalis*			
Smooth	*Digitaria ischaemum*			
Foxtails				
Bristly	*Setaria verticillata*			
Giant	*Setaria faberi*			
Green	*Setaria viridis*			
Yellow	*Setaria glauca*			
Goosegrass	*Eleusine indica*			
Guineagrass	*Panicum maximum*			
Johnsongrass, Seedling	*Sorghum halepense*			
Lovegrass, California	*Eragrostis diffusa*			
Panicum				
Fall	*Panicum dichotomiflorum*			
Texas	*Panicum texaum*			
Ryegrass, Italian	*Lolium multiflorum*			
Signalgrass, Broadleaf	*Brachiaria platyphylla*			

[1] Flumioxazin 51WDG can be used on soils with greater than 10%; however, length of residual control may be shorter than on soils with lower organic matter content.

[2] Use a maximum Flumioxazin 51WDG rate of 6 oz./A 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.

DIRECTIONS FOR USE IN SUGARCANE

Restrictions:

- **DO NOT** apply more than 8 oz. of Flumioxazin 51WDG (0.255 lb. a.i.) per acre per application.
- **DO NOT** make more than 4 applications of Flumioxazin 51WDG per acre per year at the 3 oz. rate.
- **DO NOT** apply more than 12 oz. of Flumioxazin 51WDG (0.383 lb. a.i.) per acre per year.
- **DO NOT** apply within 90 days of harvest.

TIMING TO SUGARCANE

Flumioxazin 51WDG may be applied from 2 weeks prior to planting to before the sugarcane emerges, post directed or at layby. Select the proper Flumioxazin 51WDG rate from Table 10 according to anticipated weed spectrum and soil organic matter content for preemergence applications. Select Flumioxazin 51WDG 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

Flumioxazin 51WDG 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 Flumioxazin 51WDG **before the crop emerges**. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. All Flumioxazin 51WDG tank mixes applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 qt./A or a non- ionic surfactant at 0.25% v/v. Some tank mix products, such as glyphosate, may be formulated with a suitable adjuvant and **DO NOT** require additional adjuvant.

Preemergence - Preemergence to Sugarcane, Preemergence to Weeds
Flumioxazin 51WDG 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 Flumioxazin 51WDG **before the crop emerges**.

Post-Directed - Postemergence to Sugarcane, Postemergence to Weeds
Make post-directed applications to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height and has begun to joint. Post-directed applications must not be made 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 gals. of spray solution per acre. Post-directed applications of Flumioxazin 51WDG must include a crop oil concentrate or methylated seed oil at 1 qt./A or a non-ionic surfactant at 0.25% v/v. Select the proper Flumioxazin 51WDG 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 gals. of spray solution per acre. Layby applications of Flumioxazin 51WDG must be applied with crop oil concentrate or methylated seed oil at 1 qt./A or a non-ionic surfactant at 0.25% v/v. Select the proper Flumioxazin 51WDG rate based on weed spectrum and weed height from Table 11.

Table 11. Broadleaf Weeds Controlled by Post-Directed or Layby Application of Flumioxazin 51WDG in Sugarcane

BROADLEAF WEED SPECIES		WEED HEIGHT (Inches)	
COMMON NAME	SCIENTIFIC NAME	3 oz./A	4 oz./A
Bindweed, Field1	*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
Morningglory			
Entireleaf	*Ipomoea hederacea var. integriuscula*	-	4
Ivyleaf	*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

Table 11. Broadleaf Weeds Controlled by Post-Directed or Layby Application of Flumioxazin 51WDG in Sugarcane (continued)

BROADLEAF WEED SPECIES		WEED HEIGHT (Inches)	
COMMON NAME	SCIENTIFIC NAME	3 oz./A	4 oz./A
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

[1] Flumioxazin 51WDG tank mixes will only control the above ground portion of field bindweed. Repeated applications will be needed to control regrowth.

TANK MIXTURES

Flumioxazin 51WDG may be tank mixed with the herbicides listed in Table 12 for additional weed control in burndown, pre-emergence, post-directed, and layby applications. Refer to tank mix partner's label for adjuvant directions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixing Instructions:

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.

Table 12. Tank Mixes with Flumioxazin 51WDG for Post-Directed or Layby Use in Sugarcane

TANK MIX PARTNER[1]	TARGET WEEDS	BURNDOWN	POST- DIRECTED[2]	LAYBY
2,4-D amine	Annual and Perennial Broadleaf Weeds	X		
atrazine	Pigweeds, Cocklebur	X	X	X
asulam, sodium salt[3]	Annual Grasses		X	X
ametryn[4]	Annual Grasses		X	X
glyphosate[5]	Annual and Perennial Weeds	X		X
metribuzin[6]	Broadleaf, Panicum, Goosegrass		X	X
halosulfuron-methyl	Purple Nutsedge, Yellow Nutsedge	X	X	X
2,4-D amine + dicamba dimethylamine salt	Annual and Perennial Broadleaf Weeds	X		

[1] Refer to tank mix product labels for specific directions for control of emerged weeds present not listed in Table 11.

[2] Post-directed applications must only be made to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height. Post- directed applications must not be made to "PINEAPPLE" varieties. Post-directed applications to "PINEAPPLE" varieties or to upright varieties that have not exceeded 24 inches in height may result in unacceptable crop injury.

[3] Apply to sugarcane at least 24 inches tall.

[4] Apply before weeds are greater than 6 inches tall.

[5] Glyphosate applications must be made with a hooded sprayer. Sugarcane must be a least 3 ft. 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

Flumioxazin 51WDG can be tank mixed with atrazine or diuron for additional preemergence broadleaf control.

ADDITIONAL PREEMERGENCE GRASS CONTROL

Flumioxazin 51WDG can be tank mixed with pendimethalin products for additional preemergence grass control provided sugarcane has not emerged.

DIRECTIONS FOR USE IN SUNFLOWER AND SAFFLOWER

HARVEST AID

Restrictions:

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- **DO NOT** harvest within 5 days of application.

Desiccation from Flumioxazin 51WDG 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 qt./A. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 to 2 qts./A) 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 Flumioxazin 51WDG with glyphosate or paraquat will increase control of emerged weeds and aid in harvest for sunflowers. Tank mixing Flumioxazin 51WDG with glyphosate will increase control of emerged weeds and aid in the harvest for safflower. Tank mixing Flumioxazin 51WDG with glyphosate will increase control of emerged weeds and aid in the harvest for safflower. 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.

TIMING TO SUNFLOWER AND SAFFLOWER

Apply Flumioxazin 51WDG, at 1.5 to 2 oz./A, 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 15 to 30 gallons of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure recommendations for postemergence application.

DIRECTIONS FOR USE IN SWEET POTATO

[For Use in the States of Arizona, California and Hawaii Only]

Restrictions:

- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per application.
- **DO NOT** make more than 1 application of Flumioxazin 51WDG per acre per year.
- **DO NOT** apply more than 3 oz. of Flumioxazin 51WDG (0.096 lb. a.i.) per acre per year.
- **DO NOT** apply post-emergence to sweet potatoes.
- **DO NOT** use greenhouse grown transplants.
- **DO NOT** use transplants harvested more than 2 days prior to transplanting.
- **DO NOT** use on any sweet potato variety other than "BEAUREGARD" unless user has tested Flumioxazin 51WDG 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 clomazone, if tank mix is applied prior to transplanting.

TIMING TO SWEET POTATOES

Flumioxazin 51WDG must be applied prior to transplanting sweet potatoes.

TIMING TO WEEDS

Preemergence to Weeds

Apply Flumioxazin 51WDG to soil prior to transplanting sweet potato slips for the preemergence control of the weeds listed in Table 1.

DIRECTIONS FOR USE IN WHEAT

Restrictions:

- **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre during a single application.
- **DO NOT** make more than 1 application of Flumioxazin 51WSG per acre per year.
- **DO NOT** apply more than 2 oz. of Flumioxazin 51WDG (0.064 lb. a.i.) per acre per year.

PRE-PLANT APPLICATIONS, PRE-EMERGENCE WEED CONTROL

[For Use in the States of DE, ID, KY, MD, MN, MT, NC, ND, NJ, OR, PA, SC, SD, TN, VA, WA and WI Only]

RESTRICTIONS

- For pre-plant weed control, use only on no-till or minimum tillage fields where the previous year's crops residue has not been incorporated into the soil.
- Plant wheat no sooner than 7 days after Flumioxazin 51WDG application in the states of DE, ID, KY, MD, MN, MT, NC, ND, NJ, OR, PA, SC, SD, TN, VA, WA or WI
- Plant wheat no sooner than 14 days after Flumioxazin 51WDG application in the states of DE, ID, KY, MD, MN, MT, NC, ND, NJ, OR, PA, SC, SD, TN, VA, WA or WI
- **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

Flumioxazin 51WDG, applied as part of a burndown program, at 2 oz./A, 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 Spring Wheat for rates and timing of applications. For control of emerged weeds, Flumioxazin 51WDG 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 partner's label for recommended adjuvant systems. 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.

POST-PLANT, PRE-EMERGENCE WEED CONTROL

Use

Flumioxazin 51WDG, applied at 2 oz./A, 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.

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 Flumioxazin 51WDG 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.

HARVEST AID

Flumioxazin 51WDG, applied at 2 oz./A 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 qt./A. A spray grade nitrogen source (either ammonium sulfate at 2 to 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 to 2 qts./A) 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 Flumioxazin 51WDG with glyphosate will increase control of emerged weeds and aid in harvest.

To ensure 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 recommendations for postemergence application.

RESTRICTION

- **DO NOT** harvest within 10 days of application.

TIMING TO WHEAT

Apply Flumioxazin 51WDG, at 1.5 to 2 oz./A, after wheat reaches the hard dough stage and grain has no more than 30% moisture. Wheat can be harvested 10 days after application Tigris, LLC advises tank mixing with glyphosate.

DIRECTIONS FOR USE IN BUSHBERRIES, CANEBERRY, CITRUS FRUIT, GRAPE, TREE NUT, OLIVE, POME FRUIT, POMEGRANATE, STONE FRUIT AND NON-BEARING FRUIT TREES

Bushberry (Subgroup 13-07B): Aronia Berry, Blueberry, Highbush; Blueberry, Lowbush; Buffalo Currant; Chilean Guava; Cranberry, Highbush; Currant, Black; Currant, Red; Elderberry, European Barberry, Gooseberry, Honeysuckle edible; Huckleberry; Jostaberry; Juneberry (Saskatoon Berry); Ligonberry; Native Currant; Salal; Sea Buckthorn; cultivars, varieties, and/or hybrids of these.

Caneberry (Subgroup 13-07A): Blackberry, Loganberry, Black Raspberry, Red Raspberry, Wild Raspberry cultivars, varieties and/or hybrids of these.

Citrus Fruit (Crop Group 10-10): Australian Desert Lime; Australian Finger-lime; Australian Round Lime; Brown River Finger Lime; Calamondin; Citron; Citrus hybrids; Grapefruit; Japanese Summer Grapefruit; Kumquat; Lemon; Lime; Mediterranean Mandarin; Mount White Lime; New Guinea Wild Lime; Orange, Sour; Orange, Sweet; Pummelo; Russell River Lime; Satsuma Mandarin; Sweet Lime; Tachibana Orange; Tahiti Lime; Tangelo; Tanerine (mandarin); Tangor; Trifoliate Orange; Uniq Fruit; cultivars, varieties and/or hybrids of these.

Tree Nut (Crop Group 14-12): African Nut-tree; Almond, Beechnut; Brazil Nut; Brazilian Pine; Bunya; Bur Oak; Butternut; Cajou Nut; Candlenut; Cashew; Chestnut; Chinquapin; Coconut; Coquito Nut; Dika Nut; Ginko; Guiana Chestnut; Hazelnut (Filbert); Heartnut; Hickory Nut; Japanese Horse-chestnut; Macadamia Nut; Mongongo Nut; Monkey-pot; Monkey Puzzle Nut; Okari Nut; Pachira Nut; Peach Palm Nut; Pecan; Pequi; Pili Nut; Pine Nut; Pistachio; Sapucaia Nut; Tropical Almond; Walnut, Black; Walnut, English; Yellowhorn, cultivars, varieties and/or hybrids of these.

Pome Fruit (Crop Group 11-10): Apple; Azarole; Crabapple; Loquat; Mayhaw; Medlar; Pear; Pear, Asian; Quince; Quince, Chinese; Quince, Japanese; Tejocote; cultivars, varieties and/or hybrids of these.

Stone Fruit (Crop Group 12-12): Apricot; Apricot, Japanese; Capulin; Cherry, Black; Cherry, Nanking; Cherry, Sweet; Cherry, Tart; Jujube, Chinese; Nectraine; Peach; Plum; Plum, American; Plum, Beach; Plum, Canada; Plum, Cherry; Plum, Chickasaw; Plum, Damson; Plum, Japanese; Plum, Klamath; Plum, Prune; Plumcot; Sloe and cultivars, varieties and/or hybrids of these.

Restrictions:

· Maximum Single Application Use Rate:
  - **DO NOT** apply more than 12 oz. of Flumioxazin 51WDG (0.383 lb. a.i.) per acre per application, except caneberries.
  - **Caneberries: DO NOT** apply more than 6 oz. Flumioxazin 51WDG (0.191 lb. a.i.) per acre per application.

· Maximum Annual Application Use Rate:
  - **DO NOT** apply more than 24 oz. of Flumioxazin 51WDG (0.765 lb. a.i.) per acre per year, except bushberries and caneberries.
  - **Bushberries: DO NOT** apply more than 12 oz. of Flumioxazin 51WDG (0.383 lb. a.i.) per acre per year.
  - **Caneberries: DO NOT** apply more than 6 oz. Flumioxazin 51WDG (0.191 lb. a.i.) per acre per year.

· **DO NOT** make more than 2 applications of Flumioxazin 51WDG per acre per year.

· Retreatment Interval (RTI):
  - **DO NOT** make a sequential application within 30 days of the first application, except tree nuts.
  - **Tree nuts: DO NOT** make a sequential application within 60 days of the first application.

· **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 pome fruit and stone fruit.

· **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.

· For non-bearing fruit trees (avocado and fig), **DO NOT** harvest fruit from treated trees within 1 year of application.

· Pre-Harvest Interval (PHI):

Crop	PHI (Days)
Citrus Fruit	3
Bushberries and Caneberries	7
Grape, Olive, Pome Fruit, Pomegranate, Stone Fruit, and Tree Nuts	60

Precautions:

- Use a maximum Flumioxazin 51WDG rate of 6 oz./A (0.191 lb. a.i.) 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 oz./A in a 12 month period can still be made as long as there have been 60 days between applications).
- Raise mower height during all mowing to reduce dust. Dust created by mowing can 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).
- Irrigate after application with minimum of ¼ inch of water to activate the herbicide and to reduce wind displacement of soil.

Precautions - Bushberries:

- If bushberries are established less than 2 years, ensure that they are protected from spray contact by non-porous wrap, grow tubes or waxed containers.
- **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

Precautions - Grapes:

- If grapes are established less than 2 years, ensure that 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.
- Apply only to grapes that are trellised, staked, or are free standing.
- Avoid direct or indirect spray contact to foliage and green bark (non-barked vines, with the exception of undesirable suckers).
- Plant new plantings of "own-rooted varieties", including Concord, so that all roots are a minimum of 8" 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" - 5" above the vineyard floor.
- Juice, Raisin and Wine Grapes: If applied during the period after bud break through final harvest, use 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: Apply Flumioxazin 51WDG between final harvest up to bud break.

Precautions - Citrus Fruit, Olive, Pome Fruit, Pomegranate, Stone Fruit, and Tree Nuts:

- For pome fruit and stone fruit, Flumioxazin 51WDG 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.
- For pome fruit and stone fruit, make application only to berms.
- For olive, pomegranate, and tree nuts, 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.

  * If trees are established less than one year, ensure that they are protected from spray contact by non-porous wraps, grow tubes, paint, or waxed containers.
- For apples east of the Cascade Mountains in Washington, follow the restrictions above plus:
  - Apply between final harvest and January 1st.
  - 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 1/2 inch of water within 48 hours after application.
  - Apply only to orchard berms.
- California Only: For almonds and stone fruit in the counties of Merced, San Joaquin and Stanislaus, refer to use precautions below.
- **DO NOT** apply to pears in the states of Oregon or Washington.
- **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

USE RESTRICTIONS ON ALMONDS AND STONE FRUIT IN DEFINED AREAS OF MERCED, SAN JOAQUIN AND STANISLAUS COUNTIES OF CALIFORNIA

The use of Flumioxazin 51WDG 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.

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Precautions - Non-Bearing Fruit Trees (Avocado and Fig)

• If trees are established less than one year, ensure that they are protected from spray contact by non-porous wraps, grow tubes or waxed containers.

• If applied after flowering through leaf drop, use shielded application equipment and the applicator can ensure spray drift will not come in contact with the crop foliage.

Use Directions

For bushberries, caneberries, citrus fruit, grape, olive, pomegranate, tree nuts, and non-bearing fruit trees, apply Flumioxazin 51WDG 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 stone fruit and pear, Flumioxazin 51WDG Prime can only be applied as a uniform band directed at the base of the trunk prior to "bud break". For apple, Flumioxazin 51WDG can only be applied as a uniform band directed at the base of the trunk prior to "pink bud". For other pome fruit, check with your Prime Source, LLC representative for application timing. The preferred application timing for Flumioxazin 51WDG 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.

Pre-Emergence Application

Apply 6 to 12 oz. (0.188 to 0.38 lb. a.i./A) (maximum of 6 oz./A for caneberries) of Flumioxazin 51WDG per broadcast acre as a pre-emergence application. Make pre-emergence (to weed emergence) applications of Flumioxazin 51WDG to a weed-free soil surface. Pre-emergence applications of Flumioxazin 51WDG must be completed prior to weed emergence. Moisture is necessary to activate Flumioxazin 51WDG on soil for residual weed control. Dry weather following application of Flumioxazin 51WDG may reduce effectiveness. However, when adequate moisture is received after dry conditions, Flumioxazin 51WDG will control susceptible germinating weeds.

Post-Emergence Application

If weeds are emerged at the time of application, apply 6 to 12 oz. (0.188 to 0.383 lb. a.i./A) (maximum 6 oz./A for caneberries) of Flumioxazin 51WDG per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 qt./A crop oil concentrate). The addition of an adjuvant enhances Flumioxazin 51WDG activity on emerged weeds. Thorough spray coverage is necessary to maximize the post-emergence activity of Flumioxazin 51WDG. Flumioxazin 51WDG will not control emerged weeds without the addition of a labeled burndown product.

Refer to Table 10 for weeds controlled by the residual activity of Flumioxazin 51WDG. Tank mix Flumioxazin 51WDG 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. Tank mixes with glyphosate or 2,4-D containing products are not advised during the period after bloom through final harvest to ensure crop safety from drift.

Residual weed control will be reduced if vegetation prevents the Flumioxazin 51WDG from reaching the soil surface. If vegetation is heavy, it is advised to use a burndown herbicide with Flumioxazin 51WDG and make a sequential Flumioxazin 51WDG 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 gals. 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 guidelines.

Banded Application

Rates listed in the below Table 13, refer to a broadcast application covering the entire acre. Refer to the BAND APPLICATION table within the PRODUCT INFORMATION section to calculate amount needed per acre when making a banded application.

Table 13. Weeds Controlled by Postemergence Activity of Flumioxazin 51WDG Tank Mixes

BROADLEAF WEED SPECIES			
COMMON NAME	**SCIENTIFIC NAME**	**WEED HEIGHT/LENGTH (inches)**	**FLUMIOXAZIN 51WDG HERBICIDE RATE**
Bindweed, Field[1]	*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[2]	*Oenothera laciniata*	12	
Filaree			
Broadleaf	*Erodium botrys*	4	
Redstem	*Erodium cicutarium*	4	
Florida Beggarweed	*Desmodium tortuosum*	2	
Hemp Sesbania	*Sesbania exaltata*	8	
Jimsonweed	*Datura stramonium*	4	
Lambsquarters, Common	*Chenopodium album*	4	

Table 13. Weeds Controlled by Postemergence Activity of Flumioxazin 51WDG Tank Mixes (continued)

BROADLEAF WEED SPECIES			
COMMON NAME	**SCIENTIFIC NAME**	**WEED HEIGHT/LENGTH (inches)**	**FLUMIOXAZIN 51WDG HERBICIDE RATE**
Morningglories		8	6 to 12 oz./A
Entireleaf	*Ipomoea hederacea* var. *integriuscula*	4	
Ivyleaf	*Ipomoea hederacea*		
Pitted	*Ipomoea lacunose*	4	
Red/Scarlet	*Ipomoea coccinea*	4	
Tall	*Ipomoea purpurea*	4	
Mustard, Wild	*Brassica kaber*	12	
Pigweeds			
Palmer Amaranth	*Amaranthus palmeri*	4	
Redroot	*Amaranthus retroflexus*	4	
Smooth	*Amaranthus hybridus*	2	
Plantain, Broadleaf	*Plantago major*	8	
Prickly Sida (Teaweed)	*Sida spinosa*	4	
Purslanes		4	
Common	*Portulaca oleracea*		
Rock	*Calandrinia spp.*	4	
Ragweeds		4	
Common	*Ambrosia artemisiifolia*	6	
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	

[1] Flumioxazin 51WDG will only provide control of the above ground portion of bindweed. Repeated applications will be needed to control regrowth.

[2] For acceptable control, cutleaf eveningprimrose must be 12 inches or less and in the rosette stage. Add crop oil concentrate, at 1 pt./A, or non-ionic surfactant at 0.25% v/v, to glyphosate tank mixes for cutleaf eveningprimrose control, including glyphosate formulations that contain a built-in adjuvant system.

ADDITIONAL RESIDUAL WEED CONTROL

Flumioxazin 51WDG may be tank mixed with oryzalin, simazine or diuron for additional residual weed control. 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.

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.

Flumioxazin 51WDG, 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".

Flumioxazin 51WDG 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. Flumioxazin 51WDG 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. Flumioxazin 51WDG rates of 6 to 12 oz./A are required to provide residual control of the weeds listed in Table 10.

PREEMERGENCE APPLICATION

Apply 6 to 12 oz. (0.188 to 0.38 lb. ai/A) of Flumioxazin 51WDG per broadcast acre as a preemergence application. Make preemergence (prior to weed emergence) applications of Flumioxazin 51WDG to a weed-free soil surface. Preemergence applications of Flumioxazin 51WDG must be completed prior to weed emergence. Moisture is necessary to activate Flumioxazin 51WDG on soil for residual weed control. Dry weather following application of Flumioxazin 51WDG may reduce effectiveness. However, when adequate moisture is received after dry conditions, Flumioxazin 51WDG will control susceptible germinating weeds.

POSTEMERGENCE APPLICATION

Apply 6 to 12 oz. (0.188 to 0.38 lb. ai/A) of Flumioxazin 51WDG per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 qt./A crop oil concentrate). The addition of an adjuvant enhances Flumioxazin 51WDG activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of Flumioxazin 51WDG. Emerged weeds are controlled postemergence with Flumioxazin 51WDG , however, translocation of Flumioxazin 51WDG 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 Flumioxazin 51WDG occurs when applied in combination with a surfactant to weeds less than 2 inches in height. Use a tank mix partner in combination with Flumioxazin 51WDG for the postemergence control of weeds larger than 2 inches. Advised tank mix partners are listed in Table 14.

Tank Mixtures

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.

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

glyphosate	2,4-D	glufosinate	paraquat

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STORAGE AND DISPOSAL

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

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.

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:

Container statement for Nonrefillable container small enough to shake

Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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–

Container statement for Nonrefillable container with liner greater than 50 lbs.

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 loosed 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 ¼ 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.

CONDITION 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 Prime Source, 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 Prime Source, LLC and Seller harmless for any claims relating to such factors.

Prime Source, 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 Prime Source, LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, PRIME SOURCE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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

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