Group	14	Herbicide

Flumioxazin 44% SC

Herbicide for control and suppression of weeds in:

Alfalfa, Almond, Artichoke, Asparagus, Bushberries, Caneberry, Celery, Citrus, Clover, Cotton, Dry Beans, Field Corn, Field Peas, Flax, Garlic, Grape, Hops, Lentils, Mint, Nut Trees (Including Pistachio), Onion (Dry Bulb, Crop Group 3), Olive, Peanut, Pome Fruit, Pomegranate, Potato, Soybean, Stone Fruit, Strawberry, Sugarcane, Sunflower and Safflower, Sweet Potato, Wheat, Non-Bearing Fruit and Nut Trees, Fallow Land, and to Maintain Bare Ground on Non-Crop Areas of Farms, Orchards, and Vineyards.

Active Ingredient:	**By Wt.**
Flumioxazin*	**44%**
Other Ingredients:	**56%**
Total:	**100%**

*2-[7-fluoro-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 44% SC** contains 4 lbs. flumioxazin per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCION

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

FIRST AID	
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.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • **DO NOT** induce vomiting unless told to by the poison control center or doctor. • **DO NOT** give anything by mouth to an unconscious person.

HOT LINE NUMBERS

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For 24-Hour Medical Emergency Assistance (Human or Animal), call: **1-800-222-1222**. For Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), call **CHEMTREC: 1-800-424-9300**.

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

Manufactured For:
RedEagle International LLC
5143 S. Lakeland Dr., Suite 4, Lakeland, FL 33813

EPA Reg. No.: 85678-53

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

Avoid contact with skin, eyes, or clothing. Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing spray mist. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material including polyethylene or polyvinyl chloride
- Shoes and socks

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

- Coveralls
- Chemical-resistant apron
- Chemical-resistant boots

For aerial application to field peas; flax; lentils; safflower; sunflower and wheat, mixer/loaders must also wear:

- Filtering face piece respirator (N95, R95 or P95)

For aerial application to artichoke mixer/loaders must also wear:

- Filtering face piece respirator (N95, R95 or P95)

For ground boom application to cactus (prickly pear); olive and pomegranate, mixer/loaders must also wear:

- Filtering face piece respirator (N95, R95 or P95)

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

USER SAFETY RECOMMENDATIONS

Users should:

- 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 run-off maybe hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where run-off 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, including 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 agent. 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 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 instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. The following PPE is required for early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of waterproof material
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep all unprotected persons out of operating areas, or vicinity where there may be drift.

Do not enter or allow others to enter treated areas until sprays have dried.

RESISTANCE MANAGEMENT

Flumioxazin 44% SC flumioxazin and is classified in the N-phenylphthalimide chemical class as a Group 14 herbicide, Inhibitor of protoporphyrinogen oxidase (Protox, PPO). For resistance management, **Flumioxazin 44% SC** is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to **Flumioxazin 44% SC** 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. Herbicide resistance is defined as the inherited ability of a plant to survive and reproduce following exposure to a dose of herbicide normally lethal to the wild type. In a plant, resistance may be naturally occurring or induced by such techniques as genetic engineering or selection of variants produced by tissue culture or mutagenesis. Any weed population may contain or develop plants that are naturally resistant to **Flumioxazin 44% SC** and other Group 14 herbicides. Weed species with acquired resistance to Group 14 herbicides may eventually dominate the weed population if Group 14 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Flumioxazin 44% SC** or other Group 14 herbicides.

To delay herbicide resistance, consider the below best practices for resistance management:

- Plant into weed-free fields and keep fields as weed-free as possible.
- To the extent possible, use a diversified approach toward weed management. Whenever possible incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible do not allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. Do not use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.
- Monitor treated weed populations for loss of field efficacy.
- Scout field(s) before and after application.
- Report lack of performance to registrant or their representative.

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.

Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

TANK MIXES NOTICE

Tank mixing and/or use of this product with another product that is not specifically and expressly authorized by the label shall be at 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 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.

PRODUCT USE INFORMATION

Flumioxazin 44% SC:

- Provides residual control of susceptible weeds in alfalfa, asparagus, bushberries, celery, citrus fruit, cotton, cucurbit vegetables, dry bean, field corn, garlic, grape, hops, mint, nut trees (including pistachio), onion (dry bulb), non-bearing fruit trees, peanut, pome fruit, potato, soybean, stone fruit, strawberry, sugarcane, and sweet potato.
- Provides additional burndown activity when used as part of a burndown program in alfalfa, asparagus, celery, cotton, cucurbit vegetables, dry bean, field corn, fruiting vegetables (including okra) row middles, grape, hops, nut trees (including pistachio), non-bearing fruit trees, peanut, soybean, and sugarcane.
- Can be applied as part of a fall burndown program to control susceptible winter annuals.
- Can be applied with a hooded or shielded sprayer, as well as part of a layby application, in cotton and sugarcane for post-emergence weed control as well as residual control of susceptible weeds.
- 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.
- **Read tank mix product label for rates and weeds controlled. Read and follow all label directions for all tank mix products before using. Follow the most restrictive labeling of any tank mix product. Flumioxazin 44% SC will control the weeds claimed in crop specific use directions when applied according to label use directions. This label makes no claims concerning control of other weed species.**

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

The interactions 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 AND LIMITATIONS

- Do not apply this product when weather conditions favor spray drift from treated areas.
- Do not apply during low-level inversion conditions, including fog.
- Do not apply to frozen or snow covered soil.
- Do not apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.

- Do not apply within 300 yards of non-dormant pears.
- Do not apply to powdery soils or soils that are susceptible to wind displacement unless irrigation can be applied immediately after application.
- **Do not apply other materials with spray equipment used to apply Flumioxazin 44% SC to any crop foliage unless the proper clean-out 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.
- Only apply post-directed and lay-by applications of **Flumioxazin 44% SC** to healthy growing crops.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE

Pre-Emergence 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 pre-emergence applications. Treated soil that is splashed onto newly emerged crops may result in temporary crop injury.

Adequate moisture is required to activate **Flumioxazin 44% SC** in soil for residual weed control. Dry weather following applications of **Flumioxazin 44% SC** may reduce effectiveness. However, when adequate moisture is received after dry conditions, **Flumioxazin 44% SC** will control susceptible germinating weeds. **Flumioxazin 44% SC** may not control weeds that germinate after application but before an activating rainfall/irrigation or weeds that germinate through cracks resulting from dry soil.

If adequate moisture is not received after **Flumioxazin 44% SC** 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
Apply **Flumioxazin 44% SC** as part of a burndown program to actively growing weeds. Applications in conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply **Flumioxazin 44% SC** when weeds are under stress due to drought, excessive water, extremes in temperature, disease, or low humidity. Stressed weeds are less susceptible to herbicidal action. **Flumioxazin 44% SC** is most effective when applied under warm sunny conditions.

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

Post-Emergence Application
Apply **Flumioxazin 44% SC** to healthy crops labeled for post-emergence use. Do not apply **Flumioxazin 44% SC** to crops that have been weakened by disease, drought, flooding, excessive fertilization, soil salts, previously applied pesticides, nematodes, insects, or Winter injury.

Rainfastness
Flumioxazin 44% SC is rainfast one hour after application. Applications made when rain is expected within one hour of application will reduce post-emergence efficacy.

Soil Characteristics
Application of **Flumioxazin 44% SC** to soils with high organic matter and/or high clay content 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 Pre-Emergence 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 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**".)

Pre-Emergence Application (Conventional Tillage)
To ensure uniform coverage, use 10 - 30 gals. of spray solution per acre for conventional tillage applications. Nozzle selection must meet manufacturer's gallonage and pressure specifications for pre-emergence herbicide application.

Burndown Application (Prior to Crop Emergence)
To ensure thorough coverage in burndown applications, use 15 - 60 gals. spray solution per acre. Use 20 - 60 gals. per acre if dense vegetation or heavy crop residue is present. Nozzle selection must meet manufacturer's gallonage and pressure specifications for post-emergence herbicide application. Do not use flood jet nozzles.

Post-Emergence Application (Emerged Crop)
Check use directions for specific crops in which **Flumioxazin 44% SC** can be applied post-emergence. To ensure thorough coverage in burndown applications, use a minimum of 15 gals. spray solution per acre. Use a minimum of 20 gals. per acre if dense vegetation or heavy crop residue is present. Nozzle selection must meet manufacturer's gallonage and pressure specifications for post-emergence herbicide application.

ADDITIVES

Burndown Application (Prior to Crop Emergence)

Post-emergence control of weeds from **Flumioxazin 44% SC** tank mixes requires the addition of an agronomically approved adjuvant to the spray mixture. 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 44% SC** as part of a burndown program. Some tank mix partners, for example Roundup Power Max®, 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 44% SC**. The addition of a crop oil concentrate or methylated seed oil may increase the burndown activity on certain weeds including cutleaf evening primrose and Carolina geranium. Verify mixing compatibility qualities with a jar test.

Add a spray grade nitrogen source (either ammonium sulfate at 2 - 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 - 2 qts./A) 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 44% SC

When using **Flumioxazin 44% SC** and an adjuvant, including in stale seed bed, lay-by, hooded/shielded or reduced tillage situations, preform a jar test before mixing commercial quantities of this product, when using **Flumioxazin 44% SC** 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 mL of **Flumioxazin 44% SC** to the quart jar for every 3 fl. oz. of **Flumioxazin 44% SC** per acre being applied (4 mL if 12 fl. oz./A is the desired **Flumioxazin 44% SC** 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 19g 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. If any of the following conditions are observed, do not use tank mix:
    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 44% SC**, 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., Classic® and 2,4-D respectively) are active at very small amounts and can cause crop injury when applied to susceptible crops. Clean spray equipment according to the manufacturer's directions for the last product used before the equipment is used to apply **Flumioxazin 44% SC**. If two or more products were tank mixed prior to **Flumioxazin 44% SC** application, follow the most restrictive cleanup procedure.

MIXING INSTRUCTIONS

1. Fill clean spray tank ½ - ⅔ 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. Agitate solution. Agitation creates rippling or rolling action on the water surface.
4. If tank mixing **Flumioxazin 44% SC** 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.
5. Add any required adjuvants.
6. Fill spray tank to desired level with water. **Continue agitation until all spray solution has been applied**.
7. Mix only the amount of spray solution that can be applied the day of mixing. Apply **Flumioxazin 44% SC** within 6 hours of mixing.

SPRAYER CLEAN-UP

Clean spray equipment, including mixing vessels and nurse tanks, each day following **Flumioxazin 44% SC** application. After **Flumioxazin 44% SC** is applied, use the following steps to clean the spray equipment:

1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
3. Top off tank, add 1 gal. of 3% household ammonia (or equivalent) for every 100 gals. of water, circulate through sprayer for 5 minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If diaphragms are being used on the spray boom, loosen diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm. If spray lines have any end caps, they must be loosened before flushing the system, allowing cleaning solution to spray through the loosened caps. To enhance removal of **Flumioxazin 44% SC** from the spray system, add a tank cleaner in place of ammonia and allow the cleaning solution to remain in the pressurized spray system (spray tank, hoses and boom) overnight before flushing the system for a minimum of 15 minutes.
4. Drain tank completely.

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

Spray equipment, including all tanks, hoses, booms, screens and nozzles, must be thoroughly cleaned before it is used to apply post-emergence pesticides. Equipment with **Flumioxazin 44% SC** residue remaining in the system may result in crop injury to the subsequently treated crop.

APPLICATION EQUIPMENT

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

Broadcast Application
Apply **Flumioxazin 44% SC** and **Flumioxazin 44% SC** tank mixes, with ground equipment using standard commercial sprayers equipped with flat fan or flood nozzles (pre-emergence applications only) designed to deliver the desired spray pressure and spray volume.

Band Application
When banding, use proportionately less water and **Flumioxazin 44% SC** per acre. The rate of **Flumioxazin 44% SC** required per acre, when applied as a banded application, can be calculated with the following formula:

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

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.

RESTRICTIONS
To obtain satisfactory application and avoid drift, the following directions 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 feet of non-target plants including non-target crops.
- Do not apply this product by air within 100 feet of emerged cotton crops.
- Do not apply this product by air within 40 feet of streams, wetlands, marshes, ponds, lakes, and reservoirs.

Carrier Volume and Spray Pressure: When used as part of a burndown weed control program, apply **Flumioxazin 44% SC** in 7 - 10 gals. of water per acre. Application at less than 7 gals. per acre may provide inadequate control. When used for pre-emergence weed control, apply **Flumioxazin 44% SC** in 5 - 10 gals. of water per acre. The higher gallonage applications can afford more consistent weed control. Do not exceed the nozzle manufacturer's specified 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, including 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 use directions. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

CHEMIGATION

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

Apply this product only through center pivot systems. End guns must be turned off due to uneven application.

Do not apply this product through any other type of irrigation system.

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

The system must be properly calibrated (with water only) to ensure that the amount of **Flumioxazin 44% SC** applied corresponds to the labeled rate.

Apply **Flumioxazin 44% SC** in ½ to ¾ inches of water during the first sprinkler set. Allow time for all lines to flush the herbicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining herbicide, a dye indicator may be injected into the lines to mark the end of the application period. Once chemigation has begun, the run must be completed to ensure no product is left in the system.

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

Special Instructions for Chemigation

1. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
2. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, 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 back flow.
7. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
8. The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in the case where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
11. Systems must use a metering pump, for example 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, back-flow 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 Instructions for Chemigation**".

APPLICATION WITH DRY BULK FERTILIZERS

Dry bulk fertilizer may be impregnated or coated with **Flumioxazin 44% SC**. Application of dry bulk fertilizer with **Flumioxazin 44% SC** provides weed control equal to, or slightly below, the same rate of **Flumioxazin 44% SC** applied in liquid carriers, due to better coverage with application via spray equipment. Follow label instructions for **Flumioxazin 44% SC** regarding rates, special instructions, cautions, and special precautions. Apply 400 - 700 lbs. of the fertilizer/herbicide mixture per acre to obtain adequate soil coverage. Apply the mixture to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop injury and to obtain uniform weed control.

Do not use ammonium nitrate and/or limestone as the sole source of fertilizer, as **Flumioxazin 44% SC** 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 44% SC** mixtures for sale.

Premix **Flumioxazin 44% SC** with water to form a slurry prior to impregnation on dry bulk fertilizer. Use a minimum of 1 pt. of water for each 2 fl. oz. of **Flumioxazin 44% SC**, and use a minimum of 6 pts. of **Flumioxazin 44% SC** slurry to impregnate 2,000 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 44% SC** required can be calculated with the following formula:

Fluid Ounces **Flumioxazin 44% SC** per per Ton of Fertilizer	=	Fluid Ounces of **Flumioxazin 44% SC** per Acre	x	2,000	÷	Pounds of Fertilizer Acre

Thoroughly clean dry fertilizer blending equipment after placing **Flumioxazin 44% SC** in the system to avoid injury to sensitive crops that may be treated with fertilizers blended after the equipment has been used for **Flumioxazin 44% SC**. 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 - 2 loads of unimpregnated fertilizer in the blender before switching herbicides.

ROTATIONAL RESTRICTIONS

The following rotational crops may be planted after applying **Flumioxazin 44% SC** at the specified rate. Planting earlier than the directed 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 44% SC**.

RATE FLUMIOXAZIN 44% SC OZ./A	CROPS	ROTATIONAL INTERVALS
1	Cotton (no-till or strip-till only)	14 days[1]
1.5 - 2	Cotton (no-till or strip-till only)	21 days[1]
2 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
Up to 3	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, and Sugar Beet	5 months if soil tilled prior to planting; 10 months if no tillage is performed
	Canola and all other crops not listed[2]	6 months if soil tilled prior to planting; 12 months if not tilled
	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	Sugarcane	Immediately
	Cotton, Field Corn, Peanut, Rice, Sorghum, Soybean, Sunflower, Tobacco, and Wheat	4 months
	Alfalfa, Canola, Clover, Potato, Sugar Beet, and all other crops not listed[2]	6 months if soil is tilled prior to Planting; 12 months if no tillage is performed
	Transplanted on raised beds only: Cabbage, Melon, Pepper, and Tomato	2 months (if the top 4 inches of the beds have been removed)
6 - 12	Cotton, Field Corn, Peanut, Rice, Sorghum, Soybean, Sunflower, Tobacco, and Wheat	9 months
	Alfalfa, Canola, Clover, Sugar Beet, and all other crops not listed[2] Trees can be transplanted 2 months after an application of **Flumioxazin 44% SC**[3].	12 months if soil 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] 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 **Flumioxazin 44% SC** application of 2 - 12 fl. oz./A.

Table 1. Broadleaf Weeds Controlled by Residual Activity of Flumioxazin 44% SC

BROADLEAF WEED SPECIES				
SECTION A				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 44% SC 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*			
Evening primrose, Cutleaf	*Oenothera laciniata*			
Field Pennycress	*Thlaspi arvense*			
Florida Pusley	*Richardia scabra*			
Henbit	*Lamium amplexicaule*			
Lambsquarters, Common	*Chenopodium album*			
Little Mallow	*Malva parviflora*			
Marestail/Horseweed	*Conyza canadensis*			
Mayweed/False Chamomile	*Matricaria maritime*			
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*			

COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	Flumioxazin 44% SC RATE
Puncturevine	*Tribulus terrestris*	Up to 5%	All Soil Types	2 oz./A
Purslane, Common	*Portulaca oleracea*			
Radish, Wild	*Raphanus raphanistrum*			
Redmaids	*Calandrinia ciliata var menziesii*			
Shepherd's-Purse	*Capsella bursa-pastoris*			
Smallflower Morningglory	*Jacquemontia tamnifolia*			
Sowthistle, Prickly	*Sonchus asper*			
Spotted Spurge	*Euphorbia maculata*			
Venice Mallow	*Hibiscus trionum*			
SECTION B				
All weeds listed in Section A plus:				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**Flumioxazin 44% SC[2] RATE**
Coffee Senna	*Cassia occidentalis*	Up to 3%	All Soil Types	**Cotton and Dry Bean** 2 oz./A **Field Corn and Soybean** 2.5 oz./A **Peanut and all other labeled crops** 3 oz./A
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	
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*	3 to 5%	Fine Soils: silty clay, silty clay loam, clay, clay loam	**Cotton and Dry Bean** 2 oz./A **Field Corn, Peanut, Soybean, and all other labeled crops** 3 oz./A
Palmer Amaranth	*Amaranthus palmeri*			
Spurred Anoda	*Anoda cristata*			
Tropic Croton	*Croton glandulosus*			
Waterhemps[1]				
Common	*Amaranthus rudis*			
Tall	*Amaranthus tuberculatus*			
Wild Poinsettia	*Euphorbia heterophylla*			
Yellow Rocket	*Barbarea vulgaris*			

[1] A post-emergence herbicide, including Cobra®, Phoenix™, or glyphosate (Roundup Ready® soybeans only) may be needed following a pre-emergence application of **Flumioxazin 44% SC** to adequately control common ragweed or waterhemp in soybean fields with heavy pressure.

[2] Due to differences in crop canopy timing between peanuts and soybeans, apply 3 fl. oz./A of **Flumioxazin 44% SC** in peanuts, regardless of soil type and organic matter content, except in the states of North Carolina, Oklahoma, and Virginia where a maximum of 2 fl. oz./A can be applied in peanuts. **Flumioxazin 44% SC** will provide residual control of these weeds at 2 fl. 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 44% SC

BROADLEAF WEED SPECIES			
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**FLUID OUNCES PER ACRE**
Bristly Starbur	*Acanthospermum hispidum*	Up to 5%	2 - 3
Copperleaf, Hophornbeam	*Acalypha ostryifolia*		
Ragweed, Giant	*Ambrosia trifida*		
Russian Thistle	*Salsola iberica*		
Smartweeds			
Ladysthumb	*Polygonum persicaria*		
Pennsylvania	*Polygonum pensylvanicum*		
Smellmelon[1]	*Cucumis melo*		
Velvetleaf	*Abutilon theophrasti*		
Wild Buckwheat	*Polygonum convolvulus*		
Wormwood, Biennial	*Artemisia biennis*		

GRASS WEED SPECIES			
Barnyardgrass	*Echinochloa crus-galli*	Up to 5%	2-3
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 - 3
Downy Brome	*Bromus tectorum*		

DIRECTIONS FOR USE IN FALL AND SPRING PRE-PLANT BURNDOWN AND FALLOW SEEDBED PROGRAMS IN FIELD CORN, PEANUT, AND SOYBEAN (Pre-Emergence to Crop)

RESTRICTIONS AND LIMITATIONS

- 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.

FALL BURNDOWN AND FALLOW SEEDBED PROGRAMS

Flumioxazin 44% SC at 2 - 3 fl. 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 44% SC**; Table 3, **Weeds Controlled by Fall and Spring Pre-Plant Burndown Programs**; and Table 8, **Weeds Controlled by Residual Activity of Flumioxazin 44% SC**. If weeds have emerged at the time of application, use **Flumioxazin 44% SC** 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 inch 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 44% SC** can be used in a Fall burndown or fallow seedbed program outside of Regions 1 and 2, however the length of residual control may be variable.

Abnormally warm or wet Winters will reduce the length of weed control observed in the Spring.

Fall Application Regions:
Region 1: Alabama, Arkansas, Georgia, Kentucky, Mississippi, Oklahoma, Tennessee, and Virginia
Region 2: Delaware, Kansas, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, West Virginia, and Wisconsin

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

HERBICIDE	RATE
Program 1[1]	
Flumioxazin 44% SC **Plus**	2 - 3 oz./A
glyphosate **Plus**	0.5 - 1.0 lb. a.i./A
2,4-D LVE (2,4-D for use on pre-plant soybeans only) **Plus**	0.5 - 1.0 lb. a.i./A
NIS + AMS	0.5% v/v + 17 lbs./100 gals. of water

Or

Program 2[1]	
Flumioxazin 44% SC **Plus**	2 - 3 oz./A
glyphosate **Plus**	0.5 - 1.0 lb. a.i./A
COC[2] **Or** NIS + AMS	1 pt./A **Or** 0.5% v/v + 17 lbs./100 gals. of water

Or

Program 3[1]	
Flumioxazin 44% SC **Plus**	2 - 3 oz./A
2,4-D LVE (2,4-D for use on pre-plant soybeans only) **Plus**	0.5 - 1.0 lb. a.i./A
COC	1 pt./A

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

Table 3. Weeds Controlled by Fall and Spring Pre-Plant Burndown Programs

WEEDS CONTROLLED[1]		POST-EMERGENCE			RESIDUAL
		Program 1	Program 2	Program 3	
COMMON NAME	SCIENTIFIC NAME	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 latifolia*	No	Yes	Yes	Yes
Dandelion	*Taraxacum offcinale*	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 neglects*	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	---
Evening Primrose, 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 1 lb. a.i./A of 2,4-D LVE (equivalent to 2 pts./A of 2,4-D 4 LVE) for control of emerged dandelion.
[3]Program 2 will not control emerged glyphosate resistant marestail/horseweed.
[4]To control cutleaf evening primrose that are nearing 12 inches in height or are past the rosette stage, use Program 1. Use Program 2 or 3 to control cutleaf evening primrose that are 12 inches or less and in the rosette stage

SPRING BURNDOWN PROGRAMS

Flumioxazin 44% SC may be used in combination with labeled pre-plant burndown herbicides to assist in the post-emergence 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 44% SC** 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 44% SC** cannot be applied after planting field corn.

Flumioxazin 44% SC can be used at 1 - 3 fl. oz./A with labeled pre-plant burndown herbicides to enhance the speed of burndown and increase weed spectrum.

Flumioxazin 44% SC can be used at 1 - 3 fl. oz./A in field corn, peanut and soybean burndown programs. See "**DIRECTIONS FOR USE IN FIELD CORN**", "**DIRECTIONS FOR USE IN PEANUT**", "**DIRECTIONS FOR USE IN SOYBEAN**" for more information.

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

RESTRICTIONS AND LIMITATIONS

- 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 44% SC** can be used at 1 - 2 fl. oz./A with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum.
- A minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between application of **Flumioxazin 44% SC** and planting of conventionally tilled cotton.
- A minimum of 14 days must pass, and 1 inch of rainfall/irrigation must occur, between application of **Flumioxazin 44% SC** and planting of no-till or strip-till cotton when a rate of **Flumioxazin 44% SC** at 1 fl. oz./A is used and 21 days when a rate of **Flumioxazin 44% SC** at 1.5 - 2 fl. oz./A is used. The field must contain the stubble from the previous crop.
- **Flumioxazin 44% SC** 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

Flumioxazin 44% SC at 2 - 4 fl. 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 8. If weeds have emerged

at the time of application, use **Flumioxazin 44% SC** 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 inch 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 44% SC** 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 44% SC at 1 - 2 fl. oz./A, can be used in combination with labeled pre-plant burndown herbicides to assist in the post-emergence burndown of emerged weeds and provide residual weed control prior to crop emergence in fields that will be planted with cotton or sugarcane. Weeds controlled by residual activity are listed in Table 1.

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

DIRECTIONS FOR USE IN FALL AND SPRING BURNDOWN PROGRAMS IN RICE, SORGHUM, SUNFLOWERS, TOBACCO, AND WHEAT (Pre-Plant to Crop)

RESTRICTIONS AND LIMITATIONS

- 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 44% SC** can be used at 1 - 2 fl. oz./A with labeled burndown herbicides to enhance the speed of burndown and increase weed spectrum. A minimum of 30 days must pass, and 1 inch of rainfall/irrigation must occur, between application of **Flumioxazin 44% SC** and planting of rice, sorghum, sugarcane, sunflowers, tobacco, or wheat. Refer to most restrictive label for minimum interval between application and planting.
- Observe all rotational intervals prior to planting as listed in the "**ROTATIONAL RESTRICTIONS**" table.

FALL BURNDOWN PROGRAMS

Flumioxazin 44% SC 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 two inch depth to maintain residual weed control into the Spring.

Abnormally warm Winters may reduce the length of weed control observed in the Spring.

SPRING BURNDOWN PROGRAMS

Flumioxazin 44% SC 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 RESTRICTIONS**" table above.

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

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

RESTRICTIONS AND LIMITATIONS

- 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 44% SC** 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. Labeled application rates must not be exceeded. Do not mix **Flumioxazin 44% SC** with any product containing a label prohibition against such mixing.
- Observe all rotational intervals prior to planting as listed in the "**ROTATIONAL RESTRICTIONS**" table.

FALL BURNDOWN PROGRAMS

Flumioxazin 44% SC can be used at 2 - 4 fl. 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 application of **Flumioxazin 44% SC**. Refer to most restrictive label for minimum interval between application and planting.

DIRECTIONS FOR USE IN FALLOW LAND

Flumioxazin 44% SC may be used as a pre-emergence fallow treatment. Weeds controlled by residual activity are listed in Table 1.

Flumioxazin 44% SC at 2 - 4 fl. 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 44% SC** 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 inch 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 44% SC at 1 - 4 fl. 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 AND LIMITATIONS

- Do not apply more than 4 fl. oz. of **Flumioxazin 44% SC** (0.125 pound AI) per acre during a single application.
- Do not apply more than 8 fl. oz. of **Flumioxazin 44% SC** (0.25 pound AI) per acre during a single year.
- Do not make more than 4 applications per acre during a single year.
- Do not make a sequential application of **Flumioxazin 44% SC** within 60 days of the first application of **Flumioxazin 44% SC**.
- Do not apply to alfalfa with greater than 6 inches of growth. Application will result in burning of treated leaves and stems. Understand and accept this risk before using **Flumioxazin 44% SC** on alfalfa.
- Do not apply within 25 days of harvest or grazing.
- Do not use on alfalfa grown for seed unless approved by a State authority.
- 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 44% SC** 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.

Note: Application with paraquat can be used to burndown Winter annuals prior to Winter dormant period.

TIMING TO ALFALFA

Flumioxazin 44% SC may be applied to established alfalfa with a maximum amount of growth of 6 inches or less for the pre-emergence control of the weeds listed in Table 8. 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 pre-emergence 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 pre-emergence control is in the Spring prior to alfalfa growth and before 6 inches of growth.

TIMING TO WEEDS

Pre-Emergence - Pre-Emergence to Weeds

Apply **Flumioxazin 44% SC** before alfalfa growth exceeds 6 inches in height for the pre-emergence control of weeds listed in Table 8. Make applications as soon as possible after cutting and removing alfalfa to minimize injury to alfalfa growth.

Post-Emergence Dodder Suppression
Apply **Flumioxazin 44% SC** at 4 fl. oz./A with an adjuvant for post-emergence suppression of dodder1. Tank mixes with Pursuit® Herbicide or Raptor® Herbicide will increase control.

DIRECTIONS FOR USE IN ARTICHOKE

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 4 fl. oz. of **Flumioxazin 44% SC** (0.125 pound AI) per acre during a single application on annual or perennial artichoke varieties after new planting.
- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single application on perennial artichoke varieties after cutback.
- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single year.
- Do not make more than 3 applications per acre during a single year.
- Application to artichoke foliage may result in unacceptable crop injury.

TIMING TO ARTICHOKE

Annual Varieties: **Flumioxazin 44% SC** may be applied to artichoke beds prior to transplanting. Application of **Flumioxazin 44% SC** must be made to the beds no later than 2 days prior to transplanting. Irrigation or rainfall after transplanting is necessary to activate **Flumioxazin 44% SC**. Do not irrigate **Flumioxazin 44% SC** before transplanting. Heavy irrigation or rainfall may result in crop injury. The injury is usually transitory and the plants will quickly grow out of the crop damage. Minimize soil disturbance during transplanting, as pre-emergence weed control will decrease as soil disturbance increases.

Perennial Varieties: **Flumioxazin 44% SC** may be applied to artichokes after planting of crown pieces or "cut back" of mature plants. Applications of **Flumioxazin 44% SC** must be made within 2 days after planting or cut back and prior to artichoke emergence. Application after the artichokes have begun to crack, or are emerged, will result in crop injury. Do not apply when artichokes have begun to emerge (cracking).

TIMING TO WEEDS

Pre-Plant (Annual)/Pre-Emergence (Perennial) to Artichokes - Pre-Emergence to Weeds
Apply **Flumioxazin 44% SC** pre-plant to annual artichokes for pre-emergence control of the weeds. For perennial artichokes apply before cracking for pre-emergence control the weeds. Apply prior to weed emergence. A post-emergence herbicide may be necessary to control emerged weeds. **Flumioxazin 44% SC** may be applied to annual or perennial artichokes as specified above for pre-emergence control of weeds listed in Table 8.

DIRECTIONS FOR USE IN ESTABLISHED ASPARAGUS

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single application.
- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single year.
- Do not make more than 3 applications per acre during a single 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 applications of **Flumioxazin 44% SC** prior to fern emergence. Treated soil that is splashed onto the ferns may result in spotting.

TIMING TO ASPARAGUS - Dormant

Flumioxazin 44% SC may be applied to dormant asparagus for pre-emergence control of the weeds listed in Table 12. Application to non-dormant asparagus will result in unacceptable crop injury. Applications must be made no less than two weeks prior to spear emergence and must be sprinkler or rainfall incorporated with 0.5 - 0.75 inches of water or some scoring may result.

TIMING TO ASPARAGUS - Post-Harvest

Apply **Flumioxazin 44% SC** after the final harvest of the season, but prior to fern emergence, for pre-emergence control of the weeds listed in Table 12. 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 - 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, Post-Emergence to Weeds

Flumioxazin 44% SC may be used for residual weed control, as well as to assist in post-emergence burndown of many annual and perennial weeds where asparagus is dormant. For control of emerged weeds, tank mix **Flumioxazin 44% SC** with paraquat. Refer to paraquat label for directed rate and application parameters. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. Tank mixes of **Flumioxazin 44% SC** 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 - 2.5 lbs./A or 28 to 32% nitrogen solution at 1 - 2 qts./A) may be added to increase herbicidal activity.

Burndown - After Last Harvest of Season, Post-Emergence to Weeds

Use **Flumioxazin 44% SC** for residual weed control and to assist in post-emergence 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.

Pre-Emergence - Dormant Asparagus or After Last Harvest of Season, Pre-Emergence to Weeds
Apply **Flumioxazin 44% SC** to dormant asparagus for the pre-emergence control of weeds listed in Table 12.

DIRECTIONS FOR USE IN CELERY
For Use in the States of Michigan, and Wisconsin Only

RESTRICTIONS AND LIMITATIONS
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a pre-transplant application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a post-transplant application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single 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 44% SC** at 3 fl. oz./A prior to transplanting, or between 3 and 7 days following transplanting, for pre-emergence control of the weeds listed in Table 1.

TIMING TO WEEDS
Use **Flumioxazin 44% SC** prior to weed emergence for residual control.

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed. Flumioxazin 44% SC, 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.

DIRECTIONS FOR USE FOR CHICKPEA (GARBANZO BEAN)

RESTRICTIONS AND LIMITATIONS
- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single application.
- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.

Many weather-related factors, including high wind, splashing or heavy rains or cool conditions at or near crop emergence, may result in dry bean injury in fields treated with Flumioxazin 44% SC. On occasion this has resulted in a delay in maturity. User, assume these risks before using Flumioxazin 44% SC.

TIMING TO CHICKPEA (GARBANZO BEAN)

Flumioxazin 44% SC may be applied to dry beans within 2 days after planting for the pre-emergence suppression of the weeds listed in Table 2. Tank mix **Flumioxazin 44% SC** with other labeled herbicides for broad spectrum weed control.

TIMING TO WEEDS

Flumioxazin 44% SC may be applied to garbanzo beans prior to planting or pre-emergence (after planting). Pre-emergence application of **Flumioxazin 44% SC** must be made within 2 days after planting and prior to garbanzo bean emergence. Application after the garbanzo beans have begun to crack, or are emerged, will result in severe crop injury. Do not apply when garbanzo beans have begun to crack.

Pre-plant incorporation (PPI) applications may result in reduced weed control.

ADDITIONAL RESIDUAL GRASS CONTROL

Flumioxazin 44% SC can be tank mixed with pendimethalin for additional grass control.

DIRECTIONS FOR USE IN ESTABLISHED CLOVER
For Use in the States of Idaho, Oregon and Washington Only

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 4 fluid ounces of **Flumioxazin 44% SC** (0.125 pound AI) per acre during a single application.
- Do not apply more than 4 fluid ounces of **Flumioxazin 44% SC** (0.125 pound AI) per acre during a single year.
- Do not make more than 2 applications per acre during a single year.
- Do not apply within 25 days of harvest or grazing.

PRECAUTIONS

- Do not apply to clover with greater than 6 inches of growth. Application will result in burning of treated leaves and stems. Users should understand and accept this risk before using this product on clover.
- Only apply with an adjuvant or tank mix with products formulated as an emulsifiable concentrate "EC" when targeting control of emerged weeds (expect and accept crop may be burned and/or stunting when applying tank mixes of **Flumioxazin 44% SC** with an adjuvant).
- Application with paraquat can be used to burndown winter annuals prior to winter dormant period.
- Do not use on intended mixed clover-grass stands.
- Application to clover with greater than 6 inches of growth may result in unacceptable crop injury.

TIMING TO CLOVER

Flumioxazin 44% SC may be applied to established clover with a maximum amount of growth of 6 inches or less for the pre-emergence control of the weeds listed in Table 1. 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 pre-emergence 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 pre-emergence control is in the spring prior to clover growth and before 6 inches of growth.

TIMING TO WEEDS

Pre-Emergence – Pre-Emergence to Weeds

Apply **Flumioxazin 44% SC** before clover growth exceeds 6 inches in height for the pre-emergence control of weeds listed in Table 1. Make applications as soon as possible after cutting and removing clover to minimize injury to clover growth.

Post-Emergence Dodder Suppression

Apply **Flumioxazin 44% SC** at 4 oz. per acre with an adjuvant for post-emergence suppression of dodder. Tank mixes with imazethapyr or imazamox will increase control.

DIRECTIONS FOR USE IN COTTON

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single application.
- Do not apply more than 4 fl. oz. of **Flumioxazin 44% SC** (0.125 pound AI) per acre during a single year.
- Do not make more than 2 applications per acre during a single year.
- Do not make a sequential application of **Flumioxazin 44% SC** within 30 days of the first application of **Flumioxazin 44% SC**.
- Do not apply within 60 days of harvest.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE

Hooded, Shielded, and Lay-By Application

For best results, apply **Flumioxazin 44% SC** to actively growing weeds within the growth stages indicated in this label. Applying **Flumioxazin 44% SC** under conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply **Flumioxazin 44% SC** 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 44% SC** is most effective when applied under sunny conditions at temperatures above 65°F.

Flumioxazin 44% SC is rainfast one hour after application. Do not apply if rain is expected within one hour of application or post-emergence efficacy may be reduced. Rainfall within one hour of application will not adversely affect residual activity.

HERBICIDE RATE

Hooded, Shielded, and Lay-By Application

For post-emergence weed control, apply **Flumioxazin 44% SC** through a hooded or shielded sprayer or at lay-by at 2 fl. oz./A, in combinations with MSMA or at 1 - 2 fl. 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 lay-by application of **Flumioxazin 44% SC**. Weeds that are controlled through residual activity of **Flumioxazin 44% SC** are listed in Table 1. Weeds that are suppressed by residual activity of **Flumioxazin 44% SC** are listed in Table 2.

Table 4. Emerged Broadleaf Weeds Controlled by Hooded, Shielded, and Lay-By Application of Flumioxazin 44% SC Tank Mixes With Glyphosate or MSMA in Cotton

BROADLEAF WEED SPECIES		
COMMON NAME	**SCIENTIFIC NAME**	**WEED HEIGHT (INCHES) 2 OZ./A**
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

BROADLEAF WEED SPECIES		
COMMON NAME	**SCIENTIFIC NAME**	**WEED HEIGHT (INCHES) 2 OZ./A**
Pigweeds		
Palmer Amaranth	*Amaranthus palmeri*	4
Redroot	*Amaranthus retroflexus*	4
Smooth	*Amaranthus hybridus*	4
Plantain, Broadleaf	*Plantago major*	6
Prickly Sida (Teaweed)	*Sida spinosa*	4
Purslane, Common	*Portulaca oleracea*	2
Ragweeds		
Common	*Ambrosia artemisiifolia*	2
Giant	*Ambrosia trifida*	4
Rice Flatsedge	*Cyperus iria*	2
Sicklepod	*Senna obtusifolia*	4
Smartweeds		
Ladysthumb	*Polygonum persicaria*	4
Pale	*Polygonum lapathifolium*	4
Pennsylvania	*Polygonum pensylvanicum*	4
Spotted Spurge	*Euphorbia maculata*	4
Velvetleaf	*Abutilon theophrasti*	4
Venice Mallow	*Hibiscus trionum*	2
Waterhemps		
Common	*Amaranthus rudis*	2
Tall	*Amaranthus tuberculatus*	2

[1]Tank mixes of **Flumioxazin 44% SC** 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 Lay-By Application

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

ADDITIVES

Hooded, Shielded, and Lay-By Application

Weed control from hooded, shielded, or lay-by application of **Flumioxazin 44% SC** 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 tank mixes of **Flumioxazin 44% SC**, with ground equipment using standard commercial sprayers equipped with nozzles designed to deliver the desired spray pressure and spray volume. Ensure that application equipment is clean and in good repair. Nozzles must meet manufacturer's specifications for spray pattern and placement on spray boom and must be checked frequently for accuracy.

TIMING TO COTTON

Hooded and Shielded Application

Tank mixes of **Flumioxazin 44% SC** 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**.

Lay-By Application

Lay-by application of **Flumioxazin 44% SC** 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 applications of **Flumioxazin 44% SC**. **Flumioxazin 44% SC** application must be directed to the lower 2 inches of the cotton stem to avoid crop injury.

TIMING TO WEEDS

Flumioxazin 44% SC tank mix applications must be made to weeds within the height range given in Table 4.

TANK MIXES

Flumioxazin 44% SC must be tank mixed with one of the herbicides listed in Table 5 for post-emergence control of the weeds listed in Table 4.

Table 5. Tank Mixes with Flumioxazin 44% SC for Hooded, Shielded, and/or Lay-By Use in Cotton

TANK MIX PARTNER	TARGET WEEDS	HOODED AND SHIELDED	LAY-BY
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 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.

HARVEST AID
RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not harvest within 5 days of application.

Desiccation from **Flumioxazin 44% SC** 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 - 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 - 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 44% SC** with glyphosate or paraquat will increase control of emerged weeds and aid in harvest. Add a burndown tank mix partner for the control of emerged weeds labeled for dry bean in accordance with the most restrictive labeled limitations and precautions.

TIMING TO DRY BEANS

Apply when crop is mature and at least 80% of the pods are yellowing and mostly ripe with no more than 40% (bush type beans) or 30% (vine type beans) of the leaves still green in color. Dry beans can be harvested 5 days after application. To ensure thorough coverage use 15 - 30 gals. spray solution per acre. Nozzle selection must meet manufacturer's gallonage and pressure specifications for post-emergence application.

DIRECTIONS FOR USE FOR WEED SUPPRESSION IN DRY BEANS
For Use Only in Colorado, Idaho, Nebraska, Oregon, and Washington

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.

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 1.5 fl. oz. of **Flumioxazin 44% SC** (0.047 pound AI) per acre during a single application.
- Do not apply more than 1.5 fl. oz. of **Flumioxazin 44% SC** (0.047 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.

Many weather-related factors, including high wind, splashing or heavy rains or cool conditions at or near crop emergence, may result in dry bean injury in fields treated with Flumioxazin 44% SC. On occasion this has resulted in a delay in maturity. Users, assume these risks before using Flumioxazin 44% SC.

TIMING TO DRY BEAN

Flumioxazin 44% SC may be applied to dry beans within 2 days after planting for the pre-emergence suppression of the weeds listed in Table 6. Tank mix **Flumioxazin 44% SC** with other labeled herbicides for broad spectrum weed control.

TIMING TO WEEDS

Flumioxazin 44% SC may be applied to dry beans prior to planting or pre-emergence (after planting). Pre-emergence application of **Flumioxazin 44% SC** 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.

Pre-plant incorporation (PPI) applications may result in reduced weed control.

ADDITIONAL RESIDUAL GRASS CONTROL

Flumioxazin 44% SC can be tank mixed with pendimethalin for additional grass control.

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed. When Flumioxazin 44% SC is applied according to label use directions, will suppress the weeds listed in Table 6. This label makes no claims concerning other weed Species.

Table 6. Weeds Suppressed by Residual Activity of Flumioxazin 44% SC at 1.5 Fl. Oz./A

COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	FLUMIOXAZIN 44% SC 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	*Lactuca serriola*		
Prickly Sida (Teaweed)	*Sida spinosa*		
Radish, Wild	*Tribulus terrestris*		

DIRECTIONS FOR USE IN FIELD CORN

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Use only on no-till or minimum tillage fields where last year's crop residue has not been incorporated into the soil.
- Corn must be planted between 14 - 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 fl. oz./A if a minimum of 25% of the soil surface is covered with the residue of the preceding crop and a minimum of ¼ inch of rainfall has occurred between application and planting.
- Do not irrigate between emergence and 2-leaf corn.
- Do not use on popcorn, sweet corn, or corn grown for seed.

TIMING TO FIELD CORN

- Apply **Flumioxazin 44% SC** at 2 - 3 fl. oz./A, between 7 - 30 days prior to planting field corn, for the pre-emergence control of the weeds listed in Table 1.
- Apply **Flumioxazin 44% SC** at 2 fl. oz./A, between 7 - 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 ¼ inch of rainfall has occurred between application and planting.
- Apply **Flumioxazin 44% SC** at 3 fl. oz./A, between 14 - 30 days prior to planting field corn.

Burndown Use Directions - For Pre-Plant Applications in Field Corn

Flumioxazin 44% SC, applied as part of a burndown program, may be used for residual weed control, as well as to assist in post-emergence 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 PRE-PLANT BURNDOWN AND FALLOW SEEDBED PROGRAMS IN FIELD CORN, PEANUT, AND SOYBEAN** for rates and timing of applications. For control of emerged weeds, **Flumioxazin 44% SC** must be applied with an appropriate burndown tank mix partner listed in Table 7. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. Refer to tank mix partner's label for specified application pressure and adjuvant systems.

INCREASING SPEED OF GLYPHOSATE BURNDOWN ACTIVITY

Flumioxazin 44% SC at 1 fl. oz./A, may be tank mixed with glyphosate (Roundup®) to increase the speed of burndown activity compared to glyphosate applied alone. Residual weed control will not be provided at rates lower than 2 fl. oz./A; however, suppression of the weeds in Table 2 may occur at rates of **Flumioxazin 44% SC** as low as 1 fl. oz./A. Applications of **Flumioxazin 44% SC** at 1 fl. oz./A must be made a minimum of 14 days prior to planting field corn.

TANK MIXES

Flumioxazin 44% SC may be tank mixed with the herbicides listed in Table 7 for pre-plant burndown applications. Refer to tank mix partner's label for adjuvant directions.

Table 7. Tank Mix Partners for Burndown and/or Residual Control of Weeds in Field Corn

TANK MIX PARTNERS[1]	
2,4-D	metribuzin
2,4-D/dicamba	paraquat
atrazine	rimsulfuron
clopyralid/flumetsulam	simazine
dicamba	thifensulfuron/rimsulfuron
flumetsulam	Tribenuron-methyl
glyphosate	tribenuron-methyl

[1]Refer to tank mix product labels for tank mix specifications.

TANK MIX RESTRICTIONS

Tank mixes with flufenacet, metolachlor or s-metolachlor, dimethenamid or dimethenamid-p, 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 44% SC**, unless supplemental labeling, provided by RedEagle International LLC, is followed.

DIRECTIONS FOR USE IN FIELD PEAS

WEED CONTROL

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single application.
- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.

Many weather-related factors, including high wind, splashing or heavy rains or cool conditions at or near crop emergence, may result in pea injury in fields treated with Flumioxazin 44% SC. On occasion this has resulted in a delay in maturity. User, assume these risks before using Flumioxazin 44% SC.

TIMING TO FIELD PEAS

Flumioxazin 44% SC may be applied to field peas within 2 days after planting for the pre-emergence control of the weeds listed in Table 1 or Table 2. Tank mix **Flumioxazin 44% SC** with other labeled herbicides for broad spectrum weed control.

TIMING TO WEEDS

Flumioxazin 44% SC may be applied to field peas prior to planting or pre-emergence (after planting). Pre-emergence application of **Flumioxazin 44% SC** 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. Pre-plant incorporation (PPI) applications may result in reduced weed control.

ADDITIONAL RESIDUAL GRASS CONTROL

Flumioxazin 44% SC can be tank mixed with pendimethalin for additional grass control.

HARVEST AID

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not harvest within 5 days of application.

Desiccation from **Flumioxazin 44% SC** 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 - 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 - 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 44% SC** with glyphosate will increase control of emerged weeds and aid in harvest.

TIMING TO FIELD PEAS

Apply **Flumioxazin 44% SC** at 1.5 - 2 fl. 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 44% SC** 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 - 30 gals. of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure specifications for post-emergence application.

DIRECTIONS FOR USE IN FLAX

HARVEST AID

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not harvest within 5 days of application.

Desiccation from **Flumioxazin 44% SC** 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 - 2.5 lbs./A or 28 to 32% nitrogen solution at 1 - 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 44% SC** at 1.5 - 2 fl. 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 - 30 gals. of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure specifications for post-emergence application.

DIRECTIONS FOR USE IN GARLIC

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single application.
- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.

TIMING TO GARLIC

Flumioxazin 44% SC may be applied at 6 fl. oz./A, to garlic prior to garlic emergence. Application must be made within 3 days after planting garlic.

TIMING TO WEEDS

Pre-Emergence - Pre-Emergence to Weeds

Apply **Flumioxazin 44% SC** to weed free garlic for pre-emergence control of the weeds listed in Table 12.

DIRECTIONS FOR USE IN HOPS
Not For Use in California or New York

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single application.
- Do not apply more than 6 fl. oz. of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not apply within 30 days of harvest.
- Do not use with an adjuvant.

PRECAUTIONS

- Do not allow spray to contact green stem (Unless used for sucker control), foliage, flowers or cones, or unacceptable injury may occur.

Flumioxazin 44% SC can be used in hops for pre-emergence weed control as well as sucker control.

TIMING TO HOPS FOR SUCKER CONTROL

Apply **Flumioxazin 44% SC** at 6 fl. 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 PRE-EMERGENCE WEED CONTROL

Apply **Flumioxazin 44% SC** at 6 fl. oz./A as a 1 - 1.5 ft. 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 44% SC** with a labeled burndown herbicide including paraquat or glyphosate to assist with control of emerged weeds. Do not mow or rake over treated areas, as dust created by mowing may drift onto sensitive crops or vegetation resulting in injury.

TIMING TO WEEDS

Applications of this product must be made prior to weed emergence for control of weeds listed in Table 12.

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 44% SC, when applied according to label use directions, will control the weeds listed in Table 12. This label makes no claims concerning control of other weed species.

DIRECTIONS FOR USE IN LENTILS

HARVEST AID

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not harvest within 5 days of application.

Desiccation from **Flumioxazin 44% SC** 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 - 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 - 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 44% SC** with glyphosate or paraquat will increase control of emerged weeds and aid in harvest.

TIMING TO LENTILS

Apply **Flumioxazin 44% SC** at 1.5 - 2 fl. 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 to early, a reduction in seed quality may occur.

Do not spray **Flumioxazin 44% SC** 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 - 30 gals. of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure specifications for post-emergence application.

DIRECTIONS FOR USE IN MINT
(Peppermint and Spearmint)

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 4 fl. oz. of **Flumioxazin 44% SC** (0.125 pound AI) per acre during a single application.
- Do not apply more than 8 fl. oz. of **Flumioxazin 44% SC** (0.25 pound AI) per acre during a single year.
- Do not make more than 2 applications per acre during a single year.
- Do not make a sequential application of **Flumioxazin 44% SC** within 60 days of the first application of **Flumioxazin 44% SC**.
- Do not apply within 80 days of harvest.
- Do not apply to row or baby mint, use only on established meadow mint.
- Do not apply to mint that has been weakened by diseases, insects (example mint root borer), nematodes, drought, soil salts, high soil pH, previous pesticides, Winter injury or double cutting, as severe injury may occur. Apply only to healthy vigorous mint with undamaged rhizomes.
- Do not apply before November 25th or after March 1st.
- Do not apply a Fall application if roots and rhizomes are weak, thin or damaged.
- Do not apply to stands established longer than 3 years.
- Do not apply **Flumioxazin 44% SC** on mint in Southern Union County (south of Ladd Canyon) or Baker County in Oregon.

PRECAUTIONS

- Apply only to dormant mint. Application to non-dormant mint may result in unacceptable crop injury.

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 44% SC. Users assume these risks before using Flumioxazin 44% SC.

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

TIMING TO MINT

As a spray, **Flumioxazin 44% SC** may be applied only to established, dormant mint for pre-emergence control of the weeds listed in Table 8 as well as to assist in the post-emergence 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 44% SC** 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, Post-Emergence to Weeds

Flumioxazin 44% SC may be used for residual weed control, as well as to assist in post-emergence burndown of many annual and perennial weeds where established mint is dormant. For control of emerged weeds, tank mix **Flumioxazin 44% SC** 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. Tank mixes of **Flumioxazin 44% SC** 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 - 2.5 lbs./A, or 28 to 32% nitrogen solution at 1 - 2 qts./A) may be added to increase herbicidal activity.

Pre-Emergence - Dormant Mint, Pre-Emergence to Weeds

Apply **Flumioxazin 44% SC** to dormant mint for the pre-emergence control of weeds listed in Table 8. Fall applications of **Flumioxazin 44% SC**, followed by a sequential application in the Spring, have resulted in better Summer annual weed control than a single Fall or single Spring application.

Fall application is most effective for Fall germinating weeds for example groundsel. Fields plowed or harrowed after an application of **Flumioxazin 44% SC** will result in less effective pre-emergence activity. In furrow irrigated fields, corrugating that is done after an application of **Flumioxazin 44% SC** will expose untreated soil and break the herbicide barrier resulting in poor weed control.

Table 8. Weeds Controlled by Residual Activity of Flumioxazin 44% SC

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 44% SC 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 offcinale*			
Dodder (suppression only)[1]	*Cuscuta spp.*			
Eclipta	*Eclipta prostrate*			
Evening Primrose, Cutleaf	*Oenothera laciniata*			
False Chamomile	*Tripleurospermum maritima*			
Fiddleneck, Coast	*Amsinckia menziesii*			
Field Pennycress	*Thlaspi arvense*			
Fleabane, Hairy	*Conyza bonariensis*			
Flixweed	*Descurainia sophia*			
Florida Beggarweed	*Desmodium tortuosum*			
Florida Pusley	*Richardia scabra*			
Golden Crownbeard	*Verbesina encelioides*			
Groundsel, Common	*Senecio vulgaris*			
Hairy Indigo	*Indigofera hirsuta*			
Hemp Sesbania	*Sesbania exaltata*			
Henbit	*Lamium amplexicaule*			
Jimsonweed	*Datura stramonium*			
Kochia	*Kochia scoparia*			
Lambsquarters, Common	*Chenopodium album*			
Little Mallow	*Malva parviflora*			
London Rocket	*Sisymbrium irio*			
Marestail/Horseweed	*Conyza canadensis*			
Mayweed/False Chamomile	*Matricaria maritima*			

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 44% SC RATE**
Morningglories		Up to 5%	All Soil Types	4 oz./A
Entireleaf	*Ipomoea hederacea var. integriuscula*			
Ivyleaf	*Ipomoea hederacea*			
Red/Scarlet	*Ipomoea coccinea*			
Smallflower	*Jacquemontia tamnifolia*			
Tall	*Ipomoea purpurea*			
Mustard				
Tansy	*Descurainia pinnata*			
Tumble	*Sisymbrium altissimum*			
Wild	*Brassica kaber*			
Nettle, Burning	*Urtica urens*			
Nightshades				
Black	*Solarium nigrum*			
Eastern Black	*Solarium ptycanthum*			
Hairy	*Solanum sarrachoides*			
Pigweeds				
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*			
Puncturevine	*Tribulus terrestris*			
Purslane				
Common	*Portulaca oleracea*			
Horse	*Trianthema portulacastrum*			
Radish, Wild	*Raphanus raphanistrum*			
Ragweed, Common	*Ambrosia artemisiifolia*			

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 44% SC RATE**
Redmaids	*Calandrinia ciliata var. menziesii*			
Russian Thistle	*Salsola iberica*			
Shepherd's Purse	*Capsella bursa-pastoris*			
Smartweeds				
Ladysthumb	*Polygonum persicaria*			
Pennsylvania	*Polygonum pensylvanicum*			
Smellmelon	*Cucumis melo*			
Sowthistle, Prickly	*Sonchus asper*			
Spotted Spurge	*Euphorbia maculata*			
Spurred Anoda	*Anoda cristata*			
Tropic Croton	*Croton glandulosus*			
Velvetleaf	*Abutilon theophrasti*			
Venice Mallow	*Hibiscus trionum*			
Waterhemps				
Common	*Amaranthus rudis*			
Tall	*Amaranthus tuberculatus*			
White Cockle	*Silene latifolia*			
Wild Poinsettia	*Euphorbia heterophylla*			
Wormwood, Biennial	*Artemisia biennis*			
Yellow Rocket	*Barbarea vulgaris*			
GRASS WEED SPECIES				
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	*Lolium multiflorum*			
Signalgrass, Broadleaf	*Brachiaria platyphylla*			

[1]**Flumioxazin 44% SC** at 4 fl. oz./A will provide post-emergence dodder[2] suppression when applied in combination with Pursuit Herbicide or Raptor Herbicide at labeled rates. The use of Pursuit Herbicide and Raptor Herbicide require the use of a NIS, which will result in burn and stunting of alfalfa. Growers, expect and accept this prior to using this tank mix.

DIRECTIONS FOR USE IN ONION (DRY BULB, Crop Group 3)
For use in Michigan, North Dakota and Wisconsin only

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 3 applications per acre during a single year.
- Do not make sequential application within 14 days of the first application.
- Do not apply more than 1 fl. oz. of **Flumioxazin 44% SC** per year on soils that contain greater than 90% sand plus gravel.
- Do not apply with any type of adjuvant.
- Do not apply within 45 days of harvest.

PRECAUTIONS

- Do not apply as part of a tank mix, other than with Prowl® H20, or unacceptable injury may result. Other formulations of pendimethalin should not be tank mixed with **Flumioxazin 44% SC** for use in onions.

Use of Flumioxazin 44% SC may result in necrotic spotting of onion leaves that come in contact with the spray. Users, assume this potential crop response before using Flumioxazin 44% SC.

Micro-Rate Application

Sequential applications of **Flumioxazin 44% SC** may be applied to onions (dry bulb), between the 2-leaf and 6-leaf stage at rates of 0.5 - 1 fl. oz./A, on a 7 day interval.

TIMING TO ONIONS (Dry Bulb)

Apply **Flumioxazin 44% SC** 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

Pre-Emergence - Emerged Onions (Dry Bulb), Pre-Emergence to Weeds

Apply **Flumioxazin 44% SC** to weed free onions (dry bulb) for pre-emergence control of the weeds listed in Table 1, Section A.

DIRECTIONS FOR USE IN PEANUT

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not irrigate when peanuts are cracking.
- Do not graze treated fields or feed treated hay to livestock.

PRECAUTION

- Do not apply more than 2 fl. oz./A in the states of North Carolina, Oklahoma, or Virginia where climatic conditions may result in unacceptable injury to peanuts or under conditions specified below under **PRE-EMERGENCE APPLICATION IN PEANUT.**

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 44% SC. 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 44% SC** may be reduced.

TIMING TO PEANUTS

Flumioxazin 44% SC may be applied to peanuts prior to planting or pre-emergence (after planting). Pre-emergence applications of **Flumioxazin 44% SC** 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 rate of **Flumioxazin 44% SC** from Table 1, according to anticipated weed spectrum.

TIMING TO WEEDS

Burndown - Pre-emergence to Peanuts, Post-Emergence to Weeds

Flumioxazin 44% SC, applied as part of a burndown program, may be used for residual weed control, as well as to assist in post-emergence 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 44% SC** before planting, during planting or after

planting, but before the crop emerges. For control of emerged weeds, tank mix **Flumioxazin 44% SC** 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. Tank mixes of **Flumioxazin 44% SC** applied to assist in the control of emerged weeds must be applied with an adjuvant, including a non-ionic surfactant at 0.25% v/v or a crop oil concentrate or a methylated seed oil at 1 - 2 pts./A. A spray grade nitrogen source (either ammonium sulfate at 2 - 2.5 lbs./A or 28 to 32% nitrogen solution at 1 - 2 qts./A) may be added to increase herbicidal activity. Pre-emergence (conventional tillage) applications of **Flumioxazin 44% SC** must be applied prior to weed emergence.

ADDITIONAL RESIDUAL GRASS CONTROL: SEQUENTIAL

Flumioxazin 44% SC may be applied sequentially following a pre-plant incorporated application of trifluralin (states of New Mexico, Oklahoma, and Texas only), Sonalan®, Dual® (metolachlor), pendimethalin or Frontier®.

ADDITIONAL RESIDUAL GRASS CONTROL: TANK MIXED

Flumioxazin 44% SC can be tank mixed with alachlor, metolachlor or Frontier for additional grass and broadleaf weed control. **Flumioxazin 44% SC** can also be tank mixed with pendimethalin or Sonalan in states where they are labeled, provided overhead irrigation guidelines on the pendimethalin and/or Sonalan labels are followed.

DIRECTIONS FOR USE IN POTATO

For Use in the States of Colorado, Delaware, Florida, Idaho, Maryland, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, North Carolina, North Dakota, Oregon, South Dakota, Texas, Utah, Virginia, Washington, and Wyoming Only

For chemigation applications on potato follow **CHEMIGATION – POTATO** section below.

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 1.5 fl. oz. of **Flumioxazin 44% SC** (0.047 pound AI) per acre during a single application.
- Do not apply more than 1.5 fl. oz. of **Flumioxazin 44% SC** (0.047 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not apply to Rill (Furrow) irrigated potatoes.

Many weather-related factors, including high wind, splashing or heavy rains or cool conditions at or near potato emergence, may result in potato injury in fields treated with Flumioxazin 44% SC. On occasion this has resulted in a delay in maturity. Users, assume these risks before using Flumioxazin 44% SC.

TIMING TO POTATOES

Flumioxazin 44% SC may be applied to potatoes after hilling for the pre-emergence suppression of the weeds listed in Table 8. Tank mix **Flumioxazin 44% SC** 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 application of **Flumioxazin 44% SC**. 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 pre-emergence herbicide applications, including the Red River Valley, Minnesota and North Dakota, the requirement for 2 inches of settled soil is critical to avoid crop injury. Mechanical incorporation of **Flumioxazin 44% SC** will result in decreased weed control and must be avoided. In areas with sprinkler irrigation, incorporate **Flumioxazin 44% SC** with 0.5 - 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

Pre-emergence - Soil Covered Potatoes, Pre-emergence to Weeds

Apply **Flumioxazin 44% SC** to soil covered potatoes for the pre-emergence suppression of the weeds listed in Table 6. Harrowing, cultivation or corrugating after **Flumioxazin 44% SC** application will reduce weed control.

CHEMIGATION - POTATO

Flumioxazin 44% SC may be applied through sprinkler system in potatoes. Follow all label directions for crop regarding rates, timing of application, special instructions, and precautions.

Apply **Flumioxazin 44% SC** only through center pivot systems. End guns must be turned off due to uneven application. Do not apply **Flumioxazin 44% SC** 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 44% SC** applied or responds to the specified rate.

Apply **Flumioxazin 44% SC** in ½ - ¾ inches of water during the first sprinkler set. Allow time for all lines to flush the herbicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining herbicide, a dye indicator may be injected into the lines to mark the end of the application period. Once chemigation has begun, the run must be completed to ensure no product is left in the system.

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

Special Instructions for Chemigation

1. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
2. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, 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 back flow.

7. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
8. The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in the case where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
11. Systems must use a metering pump, for example 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 Instructions for Chemigation**".

DIRECTIONS FOR USE IN SOYBEAN

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre per application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not tank mix **Flumioxazin 44% SC** with acetochlor (Warrant®), alachlor (Micro-Tech®), flufenacet (Axiom®, Domain®), metolachlor (Dual® Magnum, Dual® II Magnum, Boundary®) or dimethenamid (Frontier® or Outlook®) 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.
- Graze treated fields or feed treated hay to livestock no sooner than 21 days after application.

TIMING TO SOYBEANS

Flumioxazin 44% SC may be applied to soybeans prior to planting or pre-emergence (after planting). Pre-emergence application of **Flumioxazin 44% SC** must be made within 3 days after planting and prior to soybean emergence. Application after the soybeans have begun to crack, or are emerged, will result in severe crop injury. Do not apply when soybeans have begun to crack. Select rate of **Flumioxazin 44% SC** from Table 1, according to anticipated weed spectrum.

TIMING TO WEEDS

Burndown - Pre-Emergence to Soybeans, Post-Emergence to Weeds

Flumioxazin 44% SC, applied as part of a burndown program, may be used for residual weed control, as well as to assist in post-emergence 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 44% SC** 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 specified application pressure. All tank mixes of **Flumioxazin 44% SC** applied to assist in the control of emerged weeds must be applied with crop oil concentrate or methylated seed oil at 1 - 2 pts./A or a non-ionic surfactant at 0.25% v/v.

INCREASING SPEED OF GLYPHOSATE BURNDOWN ACTIVITY

Flumioxazin 44% SC at rates as low as 1 fl. 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 fl. oz./A; however, suppression of the weeds in Table 2, may occur at rates of **Flumioxazin 44% SC** as low as 1 fl. oz./A.

TANK MIXES

Flumioxazin 44% SC 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.

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

TANK MIX PARTNER	TARGET WEEDS[1]
2,4-D	Marestail Giant Ragweed Dandelion
paraquat	Annual Grasses Henbit
glyphosate	General Burndown
clethodim	Annual Grasses
imazaquin	Cocklebur Common Sunflower
2,4-D/dicamba	Marestail Giant Ragweed Dandelion

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

ADDITIONAL RESIDUAL BROADLEAF CONTROL

Flumioxazin 44% SC can be tank mixed with metribuzin, FirstRate®, Lorox®, Pursuit Plus®, Python®, Squadron®, Scepter, or Steel® for additional broadleaf control.

ADDITIONAL RESIDUAL GRASS CONTROL

Flumioxazin 44% SC can be tank mixed with pendimethalin or Command® for additional grass control. Tank mixes with flufenacet (Axiom® or Domain®), metolachlor (Dual® products or Boundary®), dimethenamid (Frontier® or Outlook®) or alachlor (Micro-Tech® or IntRRo®), may result in severe injury to soybeans when application is followed by prolonged periods of cool wet weather.

ROUNDUP READY PROGRAM

Flumioxazin 44% SC may be applied as part of a burndown program or pre-emergence in conventional tillage programs at 2 - 3 fl. oz./A to reduce early season weed competition from waterhemp, velvetleaf, nightshade and morninglories 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 44% SC**.

DIRECTIONS FOR USE IN STRAWBERRY

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre per application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.

PRECAUTIONS

- Apply **Flumioxazin 44% SC** at 3 fl. oz./A to the soil a minimum of 30 days prior to transplanting strawberries provided the strawberries will be transplanted through a plastic mulch.
- Apply **Flumioxazin 44% SC** at 3 fl. oz./A to dormant (established or newly planted) strawberries for the pre-emergence control of the weeds listed in Table 1.
- Apply **Flumioxazin 44% SC** at 3 fl. oz./A to strawberry row middles with a shielded or hooded sprayer for the pre-emergence 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.
Pre-emergence to dormant strawberries	Not applicable	3	3	Crop oil concentrate, at 1% v/v, or non-ionic surfactant, at 0.25% v/v, may be added to help control emerged broadleaf weeds.
Hooded or shielded Sprayer application to row middles	Do not apply after fruit set	3	3	**Apply only to row middles - do not apply over strawberries.** Apply prior to weed emergence. Crop spotting may occur if an adjuvant is added. **Application after fruit set may result in spotting of fruit.** Do not allow spray drift to come in contact with fruit or foliage.

DIRECTIONS FOR USE IN SUGARCANE

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 8 fl. oz. of **Flumioxazin 44% SC** (0.25 pound AI) per acre per application.
- Do not apply more than 12 fl. oz. of **Flumioxazin 44% SC** (0.38 pound AI) per acre during a single year.
- Do not make more than 4 applications per acre during a single year.
- Do not make a sequential application within 14 days of the first application.
- Do not apply within 90 days of harvest.

TIMING TO SUGARCANE

Flumioxazin 44% SC may be applied from 2 weeks prior to planting to before the sugarcane emerges, post-directed or at lay-by. Select the proper rate of **Flumioxazin 44% SC** from Table 12 according to anticipated weed spectrum and soil organic matter content for pre-emergence applications. Select rate of **Flumioxazin 44% SC** from Table 10 according to emerged weed spectrum and weed heights for post-directed and lay-by applications.

TIMING TO WEEDS

Burndown - Pre-Emergence to Sugarcane, Post-Emergence to Weeds

Flumioxazin 44% SC may be used for pre-emergence control, and to assist in post-emergence burndown, of many annual broadleaf weeds in sugarcane. For control of emerged weeds, choose the most appropriate tank mix partner from Table 10. Apply **Flumioxazin 44% SC** before the crop emerges. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. All tank mixes of **Flumioxazin 44% SC** 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, for example Roundup Original Max (glyphosate), may be formulated with a suitable adjuvant and do not require additional adjuvant.

Pre-Emergence - Pre-Emergence to Sugarcane, Pre-Emergence to Weeds

Flumioxazin 44% SC may be used for pre-emergence control of many annual broadleaf and grassy weeds in sugarcane. Select rate based on anticipated weed spectrum and soil organic matter content from Table 12. Apply **Flumioxazin 44% SC before the crop emerges**.

Post-Directed - Post-Emergence to Sugarcane, Post-Emergence to Weeds

Only make post-directed applications to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height and has begun to joint. Do not apply post-directed 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 44% SC** 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 rate of **Flumioxazin 44% SC** based on weed spectrum and weed height from Table 10.

Lay-By - Post-Emergence to Sugarcane, Post-Emergence to Weeds

Lay-by 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. Lay-by applications of **Flumioxazin 44% SC** 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 rate of **Flumioxazin 44% SC** based on weed spectrum and weed height from Table 10.

Table 10. Weeds Controlled by Pre-Emergence Application of Flumioxazin 44% SC

BROADLEAF WEED SPECIES			
COMMON NAME	SCIENTIFIC NAME	WEED HEIGHT (INCHES)	
		3 OZ./A	4 OZ./A
Bindweed, Field[1]	*Convolvulus arvensis*	4	8
Carpetweed	*Mollugo verticillata*	4	4
Cocklebur, Common	*Xanthium strumarium*	4	4
Florida Beggarweed	*Desmodium tortuosum*	2	2
Hemp Sesbania	*Sesbania exaltata*	6	8
Jimsonweed	*Datura stramonium*	4	4
Lambsquarters, Common	*Chenopodium album*	4	4
Morningglories			
Entireleaf	*Ipomoea hederacea var. integriuscula*	-	4
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
Plantain, Broadleaf	*Plantago major*	6	6
Prickly Sida	*Sida spinosa*	4	6
Purslanes			

Common	*Portulaca oleracea*	2	4
Rock	*Calandrinia spp.*	-	2
Ragweeds			
Common	*Ambrosia artemisiifolia*	2	2
Giant	*Ambrosia trifida*	4	4
Rice Flatsedge	*Cyperus iria*	2	4
Sicklepod	*Senna obtusifolia*	4	4
Smartweeds			
Ladysthumb	*Polygonum persicaria*	4	4
Pale	*Polygonum lapathifolium*	4	4
Pennsylvania	*Polygonum pensylvanicum*	4	4
Spotted Spurge	*Euphorbia maculata*	4	4
Velvetleaf	*Abutilon theophrasti*	4	6
Venice Mallow	*Hibiscus trionum*	2	2
Waterhemps			
Common	*Amaranthus rudis*	2	2
Tall	*Amaranthus tuberculatus*	2	2

[1]Tank mixes of **Flumioxazin 44% SC** will only control the above ground portion of field bindweed. Repeated applications will be needed to control regrowth.

TANK MIXES

Flumioxazin 44% SC may be tank mixed with the herbicides listed in Table 11 for additional weed control in burndown, pre-emergence, post-directed and lay-by applications. Refer to tank mix partner's label for adjuvant directions.

Table 11. Tank Mixes with Flumioxazin 44% SC for Post-Directed or Lay-By 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[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
Dicamba/2,4-D	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 10.
[2]Only make post-directed applications to upright sugarcane varieties after the sugarcane has exceeded 24 inches in height. Do not make post-directed applications to "PINEAPPLE" varieties. Post-directed applications to "PINEAPPLE" varieties or to upright varieties that have not exceeded 24 inches in height 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 at 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 PRE-EMERGENCE BROADLEAF CONTROL

Flumioxazin 44% SC can be tank mixed with atrazine or diuron for additional pre-emergence broadleaf control.

ADDITIONAL PRE-EMERGENCE GRASS CONTROL

Flumioxazin 44% SC can be tank mixed with PROWL (or other pendimethalin products) for additional pre-emergence grass control provided sugarcane has not emerged.

Table 12. Weeds Controlled by Pre-Emergence Application of Flumioxazin 44% SC

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 44% SC RATE**
Bristly Starbur	*Acanthospermum hispidum*	Up to 10%[1]	All Soil Types[2]	Asparagus, Garlic, Hops 6 oz./A Bushberries, Cactus, Grapes, Nut Trees (Including Pistachio), Olive, Pome Fruit, Pomegranate, Stone Fruit, and Non-Bearing Fruit Trees 6 - 12 oz./A2 Sugarcane 6 - 8 oz./A To Maintain Bare Ground on Non-Crop Areas of Farms, Orchards & Vineyards 6 - 12 oz./A
Carpetweed	*Mollugo verticillata*			
Chickweeds				
Common	*Stellaria media*			
Mouseear	*Cerastium vulgatum*			
Coffee Senna	*Cassia occidentalis*			
Dandelion	*Taraxacum officinale*			
Eclipta	*Eclipta prostrate*			
Evening Primrose, 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	*Malva parviflora*			
Marestail/Horseweed	*Conyza canadensis*			

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 44% SC RATE**
Mayweed/False Chamomile	*Matricaria maritima*	Up to 10%[1]	All Soil Types[2]	Asparagus, Garlic, Hops 6 oz./A Bushberries, Cactus, Grapes, Nut Trees (Including Pistachio), Olive, Pome Fruit, Pomegranate, Stone Fruit, and Non-Bearing Fruit Trees 6 - 12 oz./A2 Sugarcane 6 - 8 oz./A To Maintain Bare Ground on Non-Crop Areas of Farms, Orchards & Vineyards 6 - 12 oz./A
Morningglories				
Entireleaf	*Ipomoea hederacea var. integriuscula*			
Ivyleaf	*Ipomoea hederacea*			
Red/Scarlet	*Ipomoea coccinea*			
Smallflower	*Jacquemontia tamnifolia*			
Tall	*Ipomoea purpurea*			
Mustards				
London Rocket	*Sisymbrium irio*			
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 palmed*			
Redroot	*Amaranthus retroflexus*			
Smooth	*Amaranthus hybridus*			
Spiny Amaranth	*Amaranthus spinosus*			
Tumble	*Amaranthus albus*			
Prickly Lettuce (China Lettuce)	*Lactuca serriola*			
Prickly Sida (Teaweed)	*Sida spinosa*			
Puncturevine	*Tribulus terrestris*			

BROADLEAF WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 44% SC RATE**
Purslane		Up to 10%[1]	All Soil Types[2]	Asparagus, Garlic, Hops 6 oz./A Bushberries, Cactus, Grapes, Nut Trees (Including Pistachio), Olive, Pome Fruit, Pomegranate, Stone Fruit, and Non-Bearing Fruit Trees 6 - 12 oz./A2 Sugarcane 6 - 8 oz./A To Maintain Bare Ground on Non-Crop Areas of Farms, Orchards & Vineyards 6 - 12 oz./A
Common	*Portulaca oleracea*			
Horse	*Trianthema portulacastrum*			
Radish, Wild	*Raphanus raphanistrum*			
Ragweed, Common	*Ambrosia artemisiifolia*			
Redmaids	*Calandrinia ciliata var. menziesii*			
Redweed	*Melochia corchorifolia*			
Shepherd's Purse	*Capsella bursa-pastoris*			
Smellmelon	*Cucumis melo*			
Sowthistle, Annual	*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*			
Wild Poinsettia	*Euphorbia heterophylla*			
White Cockle	*Silene latifolia*			
Wormwood, Biennial	*Artemisia biennis*			
Yellow Rocket	*Barbarea vulgaris*			

GRASS WEED SPECIES				
COMMON NAME	**SCIENTIFIC NAME**	**ORGANIC MATTER**	**SOIL TYPE**	**FLUMIOXAZIN 44% SC RATE**
Barnyardgrass	*Echinochloa crus-galli*	Up to 10%[1]	All Soil Types[2]	Asparagus, Garlic, Hops 6 oz./A Bushberries, Cactus, Grapes, Nut Trees (Including Pistachio), Olive, Pome Fruit, Pomegranate, Stone Fruit, and Non-Bearing Fruit Trees 6 - 12 oz./A2 Sugarcane 6 - 8 oz./A To Maintain Bare Ground on Non-Crop Areas of Farms, Orchards & Vineyards 6 - 12 oz./A
Bluegrass, Annual	*Poa annua*			
Crabgrass				
Large	*Digitaria sanguinalis*			
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 texanum*			
Ryegrass, Italian	*Lolium multiflorum*			
Signalgrass, Broadleaf	*Brachiaria platyphylla*			

[1]**Flumioxazin 44% SC** 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 rate of **Flumioxazin 44% SC** at 6 fl. 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 SUNFLOWER AND SAFFLOWER

HARVEST AID

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.
- Do not harvest within 5 days of application.

Desiccation from **Flumioxazin 44% SC** 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 - 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 - 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 44% SC** with glyphosate or paraquat will increase control of emerged weeds and aid in harvest for sunflowers. Tank mixing **Flumioxazin 44% SC** with glyphosate will increase control of emerged weeds and aid in harvest for safflower.

TIMING TO SUNFLOWER AND SAFFLOWER

Apply **Flumioxazin 44% SC** at 1.5 - 2 fl. 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 - 30 gals. of spray solution per acre and select nozzle type using manufacturer's gallonage and pressure specifications for post-emergence application.

DIRECTIONS FOR USE IN SWEET POTATO

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single application.
- Do not apply more than 3 fl. oz. of **Flumioxazin 44% SC** (0.094 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single 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 44% SC** on other variety and has found crop tolerance to be acceptable.
- Do not apply as a part of any tank mix, except with labeled rates of Command, if tank mix is applied prior to transplanting.

TIMING TO SWEET POTATOES

Flumioxazin 44% SC must be applied prior to transplanting sweet potatoes.

TIMING TO WEEDS

Pre-Emergence to Weeds

Apply **Flumioxazin 44% SC** to soil prior to transplanting sweet potato slips for the pre-emergence control of the weeds listed in Table 1.

DIRECTIONS FOR USE IN WHEAT

For Use in the States of Delaware, Idaho, Kentucky, Maryland, Minnesota, Montana, North Carolina, North Dakota, New Jersey, Oregon, South Carolina, South Dakota, Tennessee, Virginia, and Washington Only

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single application.
- Do not apply more than 2 fl. oz. of **Flumioxazin 44% SC** (0.063 pound AI) per acre during a single year.
- Do not make more than 1 application per acre during a single year.

PRE-PLANT APPLICATIONS, PRE-EMERGENCE WEED CONTROL

RESTRICTIONS AND LIMITATIONS

- For pre-plant weed control, use only on no-till or minimum tillage fields where the previous year's crop residue has not been incorporated into the soil.
- Plant wheat no sooner than 7 days after application of **Flumioxazin 44% SC** in the states of DE, ID, KY, MD, MN, MT, NC, ND, NJ, OR, SC, SD, TN, VA, or WA
- Plant wheat no sooner than 14 days after application of **Flumioxazin 44% SC** in the states of DE, ID, KY, MD, MN, MT, NC, ND, NJ, OR, SC, SD, TN, VA, or WA
- Do not use on Durum wheat.
- Do not irrigate between emergence and spike.
- Wheat must be planted a minimum of 1 inch deep.
- Do not graze until wheat has reached 5 inches in height.

Burndown Use Directions

Flumioxazin 44% SC applied as part of a burndown program at 2 fl. oz./A may be used for residual weed control, as well as to assist in post-emergence burndown of many weeds where wheat will be planted directly into the residue of the previous crop. See **DIRECTIONS FOR USE IN FALL BURNDOWN PROGRAMS IN FIELDS TO BE PLANTED TO BARLEY, FIELD PEA, FLAX, LENTIL, SAFFLOWER, SUNFLOWER, AND WHEAT** for rates and timing of applications. For control of emerged weeds, **Flumioxazin 44% SC** must be applied with an appropriate burndown tank mix partner. To ensure thorough coverage, use a minimum of 15 gals. of spray solution per acre. Refer to tank mix partner's label for directed application pressure and adjuvant systems.

HARVEST AID

RESTRICTIONS AND LIMITATIONS

- Do not harvest within 10 days of application.

Use Directions

Flumioxazin 44% SC applied at 2 fl. 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 - 2.5 lbs./A or a 28 to 32% nitrogen solution at 1 - 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 44% SC** with glyphosate will increase control of emerged weeds and aid in harvest.

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

TIMING TO WHEAT

Apply **Flumioxazin 44% SC** at 1.5 - 2 fl. 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. RedEagle International LLC recommends tank mixing with glyphosate.

DIRECTIONS FOR USE IN ALMONDS, BUSHBERRIES, CANEBERRY, CITRUS FRUIT, GRAPES, NUT TREES (INCLUDING PISTACHIOS), OLIVE, POME FRUIT, POMEGRANATE, STONE FRUIT AND NON-BEARING FRUIT AND NUT TREES

Bushberry Crop Subgroup 13-07B Includes:

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

Caneberry Crop Subgroup 13-07A Includes:

Blackberry, Loganberry, Black Raspberry, Red Raspberry, Wild Raspberry [and] cultivars, varieties and/or hybrids of these.

Citrus Fruit Crop Group 10-10 Includes:

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

Tree Nut Crop Group 14-12 Includes:

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

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

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

RESTRICTIONS AND LIMITATIONS

- Do not apply more than 12 fluid ounces of **Flumioxazin 44% SC** (0.38 pound AI) per acre during a single application, except Caneberries, for Caneberries do not apply more than 6 fluid ounces of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single application.
- Do not apply more than 24 fluid ounces of this product (0.75 pound AI) per acre during a single year, except: Bushberries, for Bushberries do not apply more than 12 fluid ounces of **Flumioxazin 44% SC** (0.38 pound AI) per acre during a single year; Caneberries, for Caneberries do not apply more than 6 fluid ounces of **Flumioxazin 44% SC** (0.188 pound AI) per acre during a single year.
- Bushberry: Do not make more than 2 applications per acre during a single year.
- Caneberry: Do not make more than 1 application per acre during a single year.
- All others crops listed in this section: Do not make more than 4 applications per acre during a single year.
- Do not make a sequential application within 30 days of the first application, except nut trees, do not make a sequential application within 60 days of the first application.
- 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 brake and final harvest.
- Do not apply to nut trees established less than one year, unless protected from spray contact by non-porous wraps, grow tubes, or waxed containers.
- Pre-harvest Interval (PHI)
    - Citrus Fruit: 3 days
    - Bushberries: 7 days
    - Caneberries: 7 days
    - Grape: 60 days
    - Nut Trees: 60 days
    - Olive: 60 days
    - Pome Fruit: 60 days

- Pomegranate: 60 days
- Stone Fruit: 60 days

PRECAUTIONS

- Use a maximum rate of **Flumioxazin 44% SC** of 6 fluid ounces per acre per application on any soil that has a sand plus gravel content over 80% if bushes, trees or vines are less than 3 years of age. (Two applications of 6 fluid ounces per acre in a single year 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 1/4 inch of water to activate the herbicide and to reduce wind displacement of soil.
- Dust created by mowing may drift onto desirable vegetation resulting in injury.

For bushberries, caneberries, citrus fruit, grape, nut trees (including pistachio), olive, pomegranate and non-bearing fruit trees, apply **Flumioxazin 44% SC** as a uniform broadcast application to the orchard or vineyard floor or as a uniform band directed at the base of the bush, trunk or vine. For pome fruit and stone fruit, **Flumioxazin 44% SC** can only be applied as a uniform band directed at the base of the trunk prior to "pink bud" in apple and "bud break" in stone fruit and pear. The preferred application timing for this product 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 fluid ounces (0.188 to 0.38 pound AI per acre) (maximum 6 oz./A for caneberries) of **Flumioxazin 44% SC** per broadcast acre as a pre-emergence application. Make pre-emergence (to weed emergence) applications of **Flumioxazin 44% SC** should be to a weed-free soil surface. Pre-emergence applications of **Flumioxazin 44% SC** must be completed prior to weed emergence. Moisture is necessary to activate **Flumioxazin 44% SC** on soil for residual weed control. Dry weather following application of **Flumioxazin 44% SC** may reduce effectiveness. However, when adequate moisture is received after dry conditions, **Flumioxazin 44% SC** will control susceptible germinating weeds.

Post-Emergence Application

Apply 6 to 12 fluid ounces (0.188 to 0.38 pound AI per acre) (maximum 6 oz./A for caneberries) of **Flumioxazin 44% SC** per broadcast acre plus an adjuvant (0.25% v/v non-ionic surfactant or 1 quart per acre crop oil concentrate). The addition of an adjuvant enhances activity of **Flumioxazin 44% SC** on emerged weeds. Thorough spray coverage is necessary to maximize the post-emergence activity of **Flumioxazin 44% SC**. **Flumioxazin 44% SC** 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 44% SC**. Tank mix **Flumioxazin 44% SC** with a labeled burndown herbicide for control of the emerged weeds listed in Table 10. Refer to tank mix partner's label for additional weed species and increased weed heights claimed. Refer to tank mix partner's label for additional restrictions, including minimum carrier volume and crops in which tank mix partner may be used. Burndown tank mix partners include glyphosate, paraquat, 2,4-D and glufosinate. Tank mixes with glyphosate or 2,4-D containing products are not recommended during the period after bloom through final harvest to ensure crop safety from drift.

Residual weed control will be reduced if vegetation prevents this product from reaching the soil surface. If vegetation is heavy, it is recommended to use a burndown herbicide with **Flumioxazin 44% SC** and make a sequential application of this product prior to the emergence of new weeds.

Carrier Volume and Spray Pressure

To ensure thorough coverage in burndown applications, use a minimum of 15 gallons of spray solution per acre. Use higher gallonage if dense vegetation or heavy crop residue is present. Nozzle selection must meet manufacturer's gallonage and pressure specifications.

Banded Application

Rates listed in Table 10, refer to a broadcast application covering the entire acre. When making a banded application, the rate must be reduced according to the following formula:

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

USE RESTRICTIONS FOR BUSHBERRIES

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

USE PRECAUTIONS FOR GRAPES

- Do not apply to grapes established less than 2 years unless they are trellised at least 3 feet from the soil surface or are protected from spray contact by non-porous wrap, grow tubes or waxed containers.
- Do not apply to grapes that are not trellised or staked unless they are free standing.
- Avoid direct or indirect spray contact to foliage and green bark (non-barked vines, with the exception of undesirable suckers).

- Plant new plantings of "own-rooted varieties", for example Concord, so that all roots are a minimum 8 inches below the soil surface to be treated. In some situations, this may require hilling soil around newly planted vines so that the settled depth of the hill will be 4 to 5 inches above the vineyard floor.

Juice, Raisin, and Wine Grapes

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

Table Grapes

- **Flumioxazin 44% SC** may be applied during the period following final harvest up to bud break.
- Do not apply after bud break.

USE RESTRICTIONS FOR ALMONDS, CITRUS FRUIT, NUT TREES (INCLUDING PISTACHIOS), OLIVE, POME FRUIT, POMEGRANATE, AND STONE FRUIT

- Do not apply to pears in the states of Oregon or Washington.
- Do not apply to trees established less than one year, unless protected from spray contact by non-porous wraps, grow tubes, paint or waxed containers.
- Do not use in the states of Oregon or Washington except in the following counties unless the additional restrictions listed below are followed:

Oregon: Benton, Clackamas, Clatsop, Columbia, Coos, Curry, Douglas, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Morrow, Multnomah, Polk, Tillamook, Umatilla, Yamhill and Washington

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

For apples east of the Cascade Mountains in Washington (counties not listed above), follow the restrictions above plus:

- o Apply between final harvest and January 1st.
- o 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.
- o Application must be incorporated with a minimum of one half inch of water within 48 hours after application.
- o Do not apply to powdery soils or soils susceptible to wind displacement.
- o Apply only to orchard berms.
- o Do not mow the treated berm areas of the orchard.

USE PRECAUTIONS FOR ALMONDS, CITRUS FRUIT, NUT TREES (INCLUDING PISTACHIOS), OLIVE, POME FRUIT, POMEGRANATE, AND STONE FRUIT

- For pome fruit and stone fruit, **Flumioxazin 44% SC** 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 do not apply to row middles (area between berms)
- For nut trees (including Almonds and Pistachios), olive and pomegranate apply after bud break through final harvest using shielded application equipment if the applicator can ensure the spray drift will not come into contact with non-target vegetation, crop fruit and/or foliage. Shielded application equipment is not required if the following application parameters are followed:
    - Application pressure (at boom) < 30 PSI.
    - Application speed < 5 MPH.
    - Applicator can ensure the spray drift will not come into contact with non-target vegetation, crop fruit and/or foliage.

USE RESTRICTIONS FOR NON-BEARING FRUIT

Non-Bearing Avocado and Fig

- Do not apply more than 12 fluid ounces of **Flumioxazin 44% SC** (0.38 pound AI) per acre during a single application.
- Do not apply more than 24 fluid ounces of **Flumioxazin 44% SC** (0.75 pound AI) per acre during a single year.
- Do not make more than 4 applications per acre during a single year.
- Do not harvest fruit from treated trees within one year of application.
- Do not apply to trees established less than one year, unless protected from spray contact by non-porous wraps, grow tubes or waxed containers.
    - Do not apply during the period after flowering through leaf drop, unless using shielded application equipment and the applicator can ensure spray drift will not come in contact with the crop foliage.

ADDITIONAL RESIDUAL WEED CONTROL

Flumioxazin 44% SC maybe tank mixed with oryzalin (Surflan®), simazine or diuron for additional residual weed control. Always read and follow label use directions for all products being used.

Table 13. Weeds Controlled by Post-Emergence Activity of Tank Mixes of Flumioxazin 44% SC

BROADLEAF WEED SPECIES			
COMMON NAME	**SCIENTIFIC NAME**	**WEED HEIGHT/LENGTH (INCHES)**	**FLUMIOXAZIN 44% SC RATE**
Bindweed, Field[1]	*Convolvulus arvensis*	8	6 - 12 oz./A
Carpetweed	*Mollugo verticillata*	4	
Chickweeds			
Common	*Stellaria media*	4	
Mouseear	*Cerastium vulgatum*	4	
Cocklebur, Common	*Xanthium strumarium*	4	
Evening Primrose, 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	
Morningglories			
Entireleaf	*Ipomoea hederacea var. integriuscula*	4	
Ivyleaf	*Ipomoea hederacea*	4	
Pitted	*Ipomoea lacunosa*	6	
Red/Scarlet	*Ipomoea coccinea*	4	
Tall	*Ipomoea purpurea*	4	
Mustard, Wild	*Brassica kaber*	6	
Pigweeds			
Palmer Amaranth	*Amaranthus palmeri*	6	
Redroot	*Amaranthus retroflexus*	6	
Smooth	*Amaranthus hybridus*	6	
Plantain, Broadleaf	*Plantago major*	6	
Prickly Sida (Teaweed)	*Sida spinosa*	6	

BROADLEAF WEED SPECIES			
COMMON NAME	**SCIENTIFIC NAME**	**WEED HEIGHT/LENGTH (INCHES)**	**FLUMIOXAZIN 44% SC RATE**
Purslanes			6 - 12 oz./A
Common	*Portulaca oleracea*	4	
Rock	*Calandrinia spp.*	2	
Ragweeds			
Common	*Ambrosia artemisiifolia*	2	
Giant	*Ambrosia trifida*	4	
Rice Flatsedge	*Cyperus iria*	4	
Sicklepod	*Senna obtusifolia*	4	
Smartweeds			
Ladysthumb	*Polygonum persicaria*	4	
Pale	*Polygon um 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 44% SC** will only provide control of the above ground portion of bindweed. Repeated applications will be needed to control regrowth.
[2]For acceptable control, cutleaf evening primrose 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 evening primrose control, including glyphosate formulations that contain a built-in adjuvant system.

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

- 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 44% SC, 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 "**PRODUCT USE INFORMATION**".

Flumioxazin 44% SC offers residual and post-emergence 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 44% SC** can be tank mixed with the herbicides listed in Table 14 for increased residual or post-emergence 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. Rates of **Flumioxazin 44% SC** of 6 - 12 fl. oz./A are required to provide residual control of the weeds listed in Table 12.

Pre-Emergence Application

Apply 6 - 12 fl. oz. (0.188 - 0.38 lb. a.i./A) of **Flumioxazin 44% SC** per broadcast acre as a pre-emergence application. Make pre-emergence (to weed emergence) applications of **Flumioxazin 44% SC** to a weed-free soil surface. Pre-emergence applications of **Flumioxazin 44% SC** must be completed prior to weed emergence. Moisture is necessary to activate **Flumioxazin 44% SC** on soil for residual weed control. Dry weather following application of **Flumioxazin 44% SC** may reduce effectiveness. However, when adequate moisture is received after dry conditions, **Flumioxazin 44% SC** will control susceptible germinating weeds.

Post-Emergence Application

Apply 6 - 12 fl. oz. (0.188 - 0.38 lb. a.i./A) of **Flumioxazin 44% SC** 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 activity of **Flumioxazin 44% SC** on emerged weeds. Thorough spray coverage is necessary to maximize the post-emergence activity of **Flumioxazin 44% SC**. Emerged weeds are controlled post-emergence with **Flumioxazin 44% SC**, however, translocation of **Flumioxazin 44% SC** within a weed is limited, and control is affected by spray coverage and by the addition of an adjuvant. The most effective post-emergence weed control with **Flumioxazin 44% SC** 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 44% SC** for the post-emergence control of weeds larger than 2 inches. Specified tank mix partners are listed in Table 14.

IMPORTANT: Completely read and follow the label of any potential tank mix partner with **Flumioxazin 44% SC**. When using tank mixtures, use conditions must be in accordance with the most restrictive of the label limitations and precautions on either herbicide label.

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

glyphosate	2,4-D	glufosinate	paraquat

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. For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC (800) 424-9300.

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:

NOTE: This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "No refillable" or "Refillable" designation. Follow the container disposal (handling) instructions below that apply to your container type / size.

Nonrefillable Containers 5 gallons or less: 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 and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows**: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows**: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY AND DISCLAIMER STATEMENT

NOTICE: Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

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