



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 15, 2022

Niamh McMahon
Product Regulatory Manager
AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660

Subject: PRIA Label Amendment – *Reinstate Louisiana for use of product on sugarcane; add new precautionary statement*
Product Name: Envoke Herbicide
EPA Registration Number: 5481-684
Application Date: 04/07/2022
Decision Number: 583489

Dear Ms. McMahon:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

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

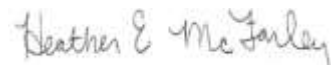
Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under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

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

If you have any questions, please contact Marc Sheahin at 202-566-2896 or at sheahin.marc@epa.gov.

Sincerely,



Heather McFarley
Product Manager 24
Fungicide and Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosure:

- Stamped label

[MASTER]

TRIFLOXYSULFURON-SODIUM **GROUP 2** **HERBICIDE**

Envoke® Herbicide

A selective herbicide for control of certain broadleaf, sedge, and grass weeds, in citrus (crop group 10), cotton, sugarcane, transplanted tomato and fallow seedbeds

Active Ingredient:

Trifloxysulfuron-sodium*	75.0%
Other Ingredients:	25.0%
Total:	100.0%

*CAS No. 290332-10-4

Envoke® Herbicide is formulated as a wettable granule (WG) and contains 0.75 lb trifloxysulfuron-sodium per lb product.

KEEP OUT OF REACH OF CHILDREN.

CAUTION/PRECAUCIÓN

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

See additional Precautionary Statements and Directions for Use inside booklet.

EPA Reg. No. 5481-684

EPA Est. No.

[Manufactured for:]
AMVAC Chemical Corporation
4695 MacArthur Court, Suite 1200
Newport Beach, CA 92660
1-888-462-6822



Net Contents

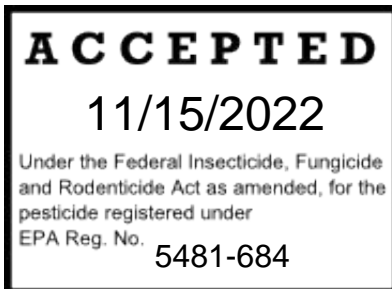


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1.0 FIRST AID

FIRST AID	
If on skin or clothing	<ul style="list-style-type: none"> • 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 in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • DO NOT induce vomiting unless told to do so by a poison control center or doctor. • DO NOT give any liquid to the person. • DO NOT give anything by mouth to an unconscious person.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
EMERGENCY INFORMATION	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p> <p>FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:</p> <p>For Medical Emergencies phone:.....1-888-681-4261</p> <p>For Transportation Emergencies, including spill, leak or fire, phone:</p> <p>CHEMTREC®.....1-800-424-9300</p> <p>For Product Use Information phone: AMVAC®.....1-888-462-6822</p>	

2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards to Humans and Domestic Animals

CAUTION/PRECAUCIÓN

Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

2.2 Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants

- Waterproof gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils or Viton[®] ≥ 14 mils
- Shoes plus socks

2.2.1 User Safety Requirements

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

2.2.2 Engineering Controls

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

2.2.3 User Safety Recommendations

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.

2.3 Environmental Hazards

DO NOT apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. **DO NOT** contaminate water when cleaning equipment or disposing of equipment washwaters or rinsates.

2.3.1 Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

2.3.2 Surface Water Advisory

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after

application. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential loading of trifloxysulfuron-sodium from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

2.3.3 Non-Target Organism Advisory

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

2.3.4 Windblown Soil Particles

Envoke Herbicide has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying Envoke Herbicide if prevailing local conditions may be expected to result in off-site movement.

DIRECTIONS FOR USE

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

Envoke Herbicide must be used only in accordance with instructions, precautions, and recommendations on this label or in separately published supplemental labeling recommendations for this product.

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.

FAILURE TO FOLLOW DIRECTIONS, PRECAUTIONS AND RESTRICTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, AND/OR ILLEGAL RESIDUES.

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 (WPS).

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

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

- Coveralls
- Waterproof gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils or Viton ≥ 14 mils
- Shoes plus socks

3.0 PRODUCT INFORMATION

Envoke Herbicide is a selective herbicide applied to both crops and weeds for control of certain emerged weeds in citrus (crop group 10), cotton, fallow seedbeds, sugarcane, and transplanted tomato. Envoke Herbicide is formulated as a water dispersible granule that must be thoroughly and uniformly mixed in water and applied as a spray. Envoke Herbicide is rain-fast within 3 hours after application.

The degree of control resulting from application of Envoke Herbicide is primarily dependent upon rate applied, weed species, weed size and application, environmental conditions, and growing conditions. Weed control is greatly improved if emerged weeds are small, actively growing, and ample soil moisture exists, compared to when the soil is dry and weeds are large or under stress from lack of moisture. Growth of susceptible weeds is inhibited soon after application of Envoke Herbicide. The leaves of susceptible plants normally turn yellow, red, or purple after several days, followed by necrosis and death of the growing point. Complete plant death occurs 1-3 weeks after application, depending upon weed species and growing conditions.

3.1 Weed Resistance Management

TRIFLOXYSULFURON-SODIUM	GROUP	2	HERBICIDE
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Envoke Herbicide controls weeds by inhibiting a biochemical process that produces certain essential amino acids necessary for plant growth. The inhibited enzyme system is acetolactate synthase (ALS). The preceding two statements describe Envoke Herbicide's mode of action (MOA).

Certain weeds species have naturally-occurring biotypes within the population that are resistant to ALS-inhibiting herbicides. Applications of ALS-inhibiting herbicides, if used alone in the same area(s) continuously over a number of years, can lead to an increased presence of ALS-resistant biotypes within a weed population. This will reduce the utility of ALS-inhibiting herbicides for controlling target weeds. To prevent or delay the selection of ALS-resistant weed biotypes, weed management programs should include the use of appropriately registered herbicides within the same or sequential years that: (1) have a different mode of action (MOA), (2) can also provide control of the target weed, and (3) are applied at full labeled rates. Mechanical control by tillage, cultivation, etc., or hand weeding before weeds set seed may also be helpful in reducing the build-up and spread of herbicide resistant weed biotypes.

3.1.1 Principles of Herbicide Resistant Weed Management

Scout and know your field

- Know weed species present in the field to be treated through scouting and field history. An understanding of weed biology is useful in designing a resistance management strategy. Ensure the weed management program will control all weeds present.
- Fields should be scouted prior to application to determine species present and growth stage. Always apply this herbicide at the full labeled rate and correct timing for the weeds present in the field.

Utilize non-herbicidal practices to add diversity

- Use diversified management tactics including cover crops, mechanical weed control, harvest weed seed control, and crop rotation as appropriate.

Use good agronomic practices, start clean and stay clean

- Use good agronomic practices that enhance crop competitiveness.
- Plant into weed-free fields utilizing tillage or an effective burndown herbicide for control of emerged weeds.
- Sanitize farm equipment to avoid spreading seed or vegetative propagules prior to leaving fields.

Difficult to control weeds

- Fields with difficult to control weeds should be planted in rotation with crops that allow the use of herbicides with an alternative mode of action or different management practices.
- Difficult to control weeds may require sequential applications, including a broad spectrum preemergence herbicide followed by one or more postemergence herbicide

applications. Utilize herbicides containing different modes of action effective on the target weeds in sequential applications.

DO NOT overuse the technology

- **DO NOT** use more than two applications of this or any other herbicide with the same mode of action in a single growing season unless mixed with an herbicide with a different mode of action which provides overlapping spectrum for difficult to control weeds.

Scout and inspect fields following application

- Prevent an influx of weeds into the field by controlling weeds in field borders.
- Scout fields after application to verify that the treatment was effective.
- Suspected- herbicide resistant weeds may be identified by these indicators
 - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
 - A spreading patch of non-controlled plants of a particular weed species; and
 - Surviving plants mixed with controlled individuals of the same species.
- Report non-performance of this product to AMVAC at (1-888-462-6822) . If resistance is suspected ensure weed escapes are controlled using an herbicide with an effective mode of action and/or use non-chemical means to prevent further seed production.

Prevent weed escapes before, during, and after harvest

- **DO NOT** allow weed escapes to produce seed or vegetative structures including tubers or stolons which contribute to spread and survival. Consider harvesting weed seeds for management and control of weeds post-harvest to further reduce the weed seed bank in the soil.

Resistant Weeds

- Contact your local AMVAC representative, retailer, crop advisor or extension agent to determine if weeds resistant to this mode of action are present in your area. If resistant biotypes have been reported, use the full labeled rate of this product, apply at the labeled timing, and tank-mix with a different mode of action product so there are multiple effective modes of application for each suspected resistant weed.

4.0 APPLICATION DIRECTIONS

4.1 Methods of Application

Applications with Envoke Herbicide alone or in tank mixtures are permitted by ground application only. Preemergence, postemergence, and postemergence directed applications are allowed as specified in **Section 9.0** unless otherwise restricted in **Section 7.0**.

4.2 Application Equipment

- Configure spray equipment to provide accurate and uniform coverage of the target area and minimize potential for spray drift.
- To ensure accuracy, calibrate sprayer at the beginning of the season, and before each use.
- For information on spray equipment and calibration, consult spray equipment manufacturers and/or state recommendations.
- All application equipment must be properly maintained.
- Use spray nozzles that provide a medium or coarser droplet size.
- Pump must have the capacity to maintain the nozzle manufacturer's minimum specified pressure at the nozzle and provide sufficient agitation within the tank to keep product in suspension.
- Lower pressure may be used with extended range or drift reduction flat fan nozzles.
- A centrifugal pump that provides sheer action for dispersing and mixing the product is advised.
- The pump must provide a minimum of 20 gallons/minute/100 gallons tank capacity circulated through a correctly positioned sparger tube or jet agitators.
- If jet agitators are used, at least 2 agitators must be aligned on the bottom of the tank pointing to each end.
- Screens or strainers placed on the suction side of the pump must be 16-mesh or coarser.
- **DO NOT** place a screen in the re-circulation line unless a roller or piston pump is used for spraying the solution.
- Use 50-mesh or coarser screens between the pump and boom, and at the nozzles.

4.3 Application and Volume and Spray Coverage

- Good weed coverage with the spray mixture is essential for optimum weed control.
- Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform.
- Spray boom and nozzle heights must be adjusted to provide coverage of target weeds.
- If the crop height or crop canopy prevents adequate weed coverage, apply Envoke Herbicide with drop nozzles post-directed onto the weeds in a way that maximizes coverage of the weeds and minimizes contact with the crop.
- Use a minimum of 10 gallons water per acre.
- Higher volumes (i.e., at least 20 gallons/A) must be used for severe weed infestations to ensure adequate spray coverage.
- Always include in the spray mixture a nonionic surfactant (NIS), approved for application to growing crops as directed in **Section 9.0**.

4.4 Mixing Directions

- Thoroughly clean spray equipment before using this product. See **Section 4.7** for further details. If it is contaminated with other materials, mixing problems and/or clogging may occur which would cause injury to the crop or reduced performance. Dispose of the cleaning solution in a responsible manner.
- For products packaged in water-soluble packaging, **DO NOT** tank mix with products

containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been thoroughly cleaned. Please refer to **Section 4.7** for more details.

- Make only sufficient spray mixture that can be used in the day it is mixed. It is advised that continuous agitation be maintained.
- Make certain that the agitation system is working properly and creates a rippling or rolling action on the water surface before beginning the mixing process.
- Agitate the spray solution when mixing, and before and during application.
- Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

4.4.1 Envoke Herbicide Alone

1. Fill the spray tank with $\frac{1}{4}$ - $\frac{1}{2}$ with clean water and begin agitation.
2. Add any products packaged in water-soluble film to the tank first. Allow packets to completely dissolve and the contents of the packets to fully disperse into the mix water.
3. **Important:** Water-soluble packets must always be the first material put into the spray tank after water.
4. Add the required amount of Envoke Herbicide to the spray tank while maintaining agitation. Allow the product to wet and thoroughly disperse into the mix water.
5. Maintain agitation while adding adjuvant.
6. Complete filling the tank; maintaining sufficient agitation at all times to ensure surface action until the spray tank mixture is uniform.
7. An anti-foaming agent may be added to reduce excessive foaming, if it occurs.

4.4.2 Tank-Mix Precautions

- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations and directions for use on all product labels involved in tank mixing. User must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- Tank mixes of Envoke Herbicide with other pesticides, fertilizers, or any other additives not specifically labelled for use with Envoke Herbicide may result in tank mix incompatibility or unsatisfactory performance. In such cases, always check tank mix compatibility by conducting a jar test according to guidance in **Section 4.4.3** before actual tank mixing.

4.4.3 Tank-Mix Compatibility

- Conduct a jar test using a 1 pt to 1 qt container with lid by adding water or other intended carrier such a liquid fertilizer to the jar.
- Next, add the appropriate amount of pesticides(s) or tank-mix partner(s) in their relative proportions based on specified label rates. Add tank-mix components separately in the order described in the tank-mixing section, **Section 4.4.4**. After each addition, shake or stir gently to thoroughly mix.
- After all ingredients have been added, put the lid on the jar, tighten and invert the jar 10 times to mix.

- After mixing, let the mixture stand 15–30 minutes and then examine for signs of incompatibility including obvious separation, large flakes, precipitates, gels or heavy oily film on the jar.
- If the mixture remains mixed or can be remixed readily, it is physically compatible and can be used.
- If the mixture is incompatible, repeat the test using a compatibility agent at the specified rate. Or, if applicable, slurry dry formulations in water before adding to the jar. If incompatibility is still observed after following these procedures, **DO NOT** use the mixture.
- After compatibility testing is complete, dispose of any pesticide wastes in accordance with the storage and disposal section, **Section 10.0**, of this label.

4.4.4 Envoke Herbicide In Tank Mixtures

1. Fill the spray tank with $\frac{1}{4}$ - $\frac{1}{2}$ with clean water and begin agitation.
2. Add any products packaged in water-soluble film to the tank first. Allow packets to completely dissolve and the contents of the packets to fully disperse into the mix water.
3. **Important:** Water-soluble packets must always be the first material put into the spray tank after water.
4. Add the required amount of Envoke Herbicide to the spray tank while maintaining agitation. Allow the product to wet and thoroughly disperse into the mix water.
5. While maintaining agitation, continue filling the spray tank. When the tank is $\frac{3}{4}$ full, add any tank mix partners in the following order:
 - Any water-dispersible granule or other dry formulation first and allow that material to fully and uniformly disperse.
 - Then add any emulsifiable liquid formulation.
6. Maintain agitation while adding adjuvant.
7. Complete filling the tank; maintaining sufficient agitation at all times to ensure surface action until the spray tank mixture is uniform.
8. An anti-foaming agent may be added to reduce excessive foaming, if it occurs.

4.4.5 Spray Additives

The following spray additives are advised as directed in **Section 9.0**:

- A high quality nonionic surfactant (NIS) with a minimum of 80% surface-active agent can be added to Envoke Herbicide spray solution at 0.25% (v/v) or 1qt/100gal.
- A nonphytotoxic crop oil concentrate (COC) containing 15-20% approved emulsifier can be added to Envoke Herbicide spray solution at 0.5-1.0% v/v (2-4qt/100gal).

4.5 Spray Drift Management

As with all crop protection products, it is important to avoid off-target movement onto adjacent land or crops, as even small amounts may injure sensitive plants. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator

and grower must consider the interaction of equipment and weather-related factors to ensure that the potential for drift to sensitive non-target plants is minimal. This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, non-target plants) is minimal (i.e., when the wind is blowing away from the sensitive area). Consult with local and State agricultural authorities for information regarding avoiding or minimizing spray drift.

MANDATORY SPRAY DRIFT MANAGEMENT

GROUNDBOOM APPLICATIONS

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

4.6 Spray Drift Advisory

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

Importance of Droplet Size

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

Controlling Droplet Size – Groundboom

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

Boom Height – Groundboom

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

Shielded Sprayers

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

Temperature and Humidity

- When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

Temperature Inversions

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

Wind

- Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.**
- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

4.7 Spray Cleanout

Because some crops are extremely sensitive to low rates of Envoke Herbicide, special attention must be given to cleaning equipment before spraying a crop other than those listed on this label. Immediately after spraying, clean equipment thoroughly using the following procedure.

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare a tank cleaning solution using a commercial tank cleaner or a solution of 1 gallon household ammonia per 50 gallons water.
3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all internal parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly re-circulate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
4. Flush hoses, spray lines, and nozzles for at least several minutes with the cleaning solution.

5. Dispose of rinsate from steps 1-4 in an appropriate manner. Spray the cleaning solution on an untreated crop on which Envoke Herbicide is registered, or return to a rinsate tank for later use as make-up water for spraying crops on which Envoke Herbicide is registered, or use other approved disposal.
6. Repeat steps 2-5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

Note: If the tank is equipped with the proper number of correctly mounted 360° tank washing nozzles that are attached to a dedicated rinsing system, less than a full tank of cleaning solution may be used. Use sufficient cleaning solution to thoroughly rinse all surfaces. Start the sprayer agitation and re-circulate the cleaning solution for at least 15 minutes. Flush the spray boom with the cleaning solution. Repeat the rinsing procedure 1-2 times.

5.0 REPLANT AND ROTATIONAL CROPS

5.1 Replanting

If a crop treated with Envoke Herbicide is lost, replant options are shown in the table below.

Crop/Type of Application	Amount of Envoke Herbicide Applied (see Table 12.1 for lb A/A equivalent)	Replanting Options	Time of Application
Citrus (crop group 10)	1.2 oz/A	Citrus Trees	Cease to apply 1-2 years in advance.
		All other crops	Wait 18 months after last application before planting.
Cotton	No more than 0.15 oz/A	Cotton STS™ (Sulfonylurea Tolerant Soybean) STS/Roundup Ready® (RR) Imidazolinone resistant (IR/IT) corn	30 days after application or 14 days or more after first significant rainfall event (>0.5 inches) after application of Envoke Herbicide
	>0.15-0.40 oz/A	Cotton STS™ (Sulfonylurea Tolerant Soybean)	30 days after significant rainfall event ≥0.5 inches following application of Envoke Herbicide
Fall Fallow Seedbed Application	0.15 oz/A	See Section 5.2.3	

Crop/Type of Application	Amount of Envoke Herbicide Applied (see Table 12.1 for lb AI/A equivalent)	Replanting Options	Time of Application
Sugarcane	0.4 oz/A	Sugarcane	Immediately
	0.9 oz/A		
	1.5 oz/A		
Tomato	0.3 oz/A per year	Transplanted tomatoes (as long as plant bed is not disturbed)	Immediately

5.2 Rotational Crop Restrictions

5.2.1 Rotational Crop Restrictions Following Citrus (crop group 10)

The following crops may be planted at the specified interval following application of Envoke Herbicide to Citrus.

Rotational Crop	Plant-Back Interval in Months
Bell Pepper (transplanted)	18*
Cotton	18
Cucurbits	18*
Grain sorghum	18
Parsley	18*
Potato, Irish	18*
Radish	18*
Rice	18
Tomato (seeded)	18*
Wheat, winter	18
Leafy vegetables	18*
All other crops	18*
Precaution:	
<ul style="list-style-type: none"> *Field Bioassay. After the above interval take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop in the collected soil and allow to grow for three weeks. If, at the end of three weeks, there are no adverse effects on root and shoot growth of the intended rotational crop, when comparing plants on treated and untreated soil, the intended rotational crop can be planted with good growing conditions. 	

5.2.2 Rotational Crop Restrictions Following Cotton

The following crops may be planted at the specified interval following the application of Envoke Herbicide to Cotton in AL, AR, FL, GA, KS, KY, LA, MO [Bootheel], MS, NC, SC, TN, and VA.

Rotational Crop	Plant-Back Interval in Months
Bell pepper (transplanted)	12*
Cotton	7
Corn, field	7
Corn, sweet	7

Grain sorghum	7
Parsley	12*
Peanut	7
Potato, Irish	12*
Radish	12*
Rice	7
Soybean	7
Sugarcane	1
Tobacco (transplanted)	7
Tomato (transplanted)	3
Wheat, winter	3
All other crops	18*

Precaution:

- *Field Bioassay. After the above interval take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop in the collected soil and allow to grow for three weeks. If, at the end of three weeks, there are no adverse effects on root and shoot growth of the intended rotational crop, when comparing plants on treated and untreated soil, the intended rotational crop can be planted with good growing conditions.

The following crops may be planted at the specified interval following application of Envoke Herbicide to Cotton in AZ.

Rotational Crop	Plant-Back Interval in Months	Minimum Rainfall and/or irrigation (inches) between application and rotational crop planting
Alfalfa	14	72
Barley	6	48
Cantaloupe	12	72
Cotton	7	48
Corn, field	12	48
Grain sorghum	12	48
Wheat, winter	3	48
All other crops	18*	

Precautions:

- *Field Bioassay. For all other crops not listed in the table, after the 18 month interval, take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop in the collected soil and allow to grow for three weeks. If, at the end of three weeks, there are no adverse effects on root and shoot growth of the intended rotational crop, when comparing plants on treated and untreated soil, the intended rotational crop can be planted with good growing conditions.
- In cantaloupe normal crop harvest, which has been treated with Envoke Herbicide, the crops listed above may be planted at, or after, the time interval specified from the last application provide the **minimum rainfall and/or irrigation** shown in the table has occurred.
- Uniform irrigation must be applied to all furrows.
- After harvest of cotton treated with Envoke Herbicide, that has received 48 inches of rainfall and/or irrigation since the last Envoke Herbicide application, another crop receiving a minimum of 24 inches or irrigation must be grown before planting cantaloupe.

ROTATIONAL USE RESTRICTIONS

1. Envoke Herbicide cannot be used in cotton in two consecutive years.
2. A minimum of two cultivations must be made following application of Envoke Herbicide to cotton (pre or post-harvest) before planting any rotational crop.

Rotation plantbacks following application of Envoke Herbicide to cotton in NM, OK and TX are divided into 4 geographical zones defined in the table below. Refer to **Section 9.2** for a map of the geographical zones.

The following crops may be planted at the specified interval following application of Envoke Herbicide to Cotton in Zone 1, Zone 2 and Zone 3.

Geographical Zone	Geographical Description
Zone 1	OK and TX [East of I-35]
Zone 2	TX [West of I-35, East of State Highway 83, South of I-20]
Zone 3	NM, OK [West of I-35] and TX [West of I-35, excluding Zones 2 and 4]
Zone 4	TX [Within the area bordered by I-20 and I-10 and State Highway 83]
Zones 1 and 2	
Rotational Crop	Plant-Back Interval in Months
Bell pepper (transplanted)	12*
Cotton	7
Corn, field	7
Corn, sweet	7
Grain sorghum	7
Parsley	12*
Peanut	7
Potato, Irish	12*
Radish	12*
Rice	7
Soybean	7
Sugarcane	1
Tobacco (transplanted)	7
Tomato (transplanted)	3
Wheat, winter	3
All other crops	18*
Zone 3	
Rotational Crop	Plant-Back Interval in Months
Alfalfa	16
Bell Pepper (transplanted)	22
Cotton	7
Corn, field	22
Cucumber	22
Grain sorghum	22
Onion	22
Peanut	22
Soybean	10
Sunflower	10
Watermelon	22
Wheat, winter	3
All other crops	22
Precaution:	
<ul style="list-style-type: none"> *Field Bioassay. After the above interval take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop in the collected soil and allow to grow for three weeks. If, at the end of three weeks, there are no 	

adverse effects on root and shoot growth of the intended rotational crop, when comparing plants on treated and untreated soil, the intended rotational crop can be planted with good growing conditions.

- **Zone 3:** Following normal crop harvest, which has been treated with Envoke Herbicide, the crops listed above may be planted at, or after, the time interval specified from the last application provided a minimum of 24 inches of rainfall or irrigation has occurred. Uniform irrigation must be applied to all furrows. If another herbicide with a longer rotational interval was used, follow the longer rotational limitation.

5.2.3 Rotational Crop Restrictions Following Fall-Applied Fallow Seedbeds

The following crops may be planted at the specified interval following application of Envoke Herbicide to Fall-Applied Fallow Seedbeds.

Rotational Crop	Plant-Back Interval in Months
Bell Pepper (transplanted)	16*
Cotton	3
Corn, field	16
Corn, sweet	16
Grain sorghum	16
Parsley	16*
Peanut	16
Potato, Irish	16*
Radish	16*
Rice	16
Soybean, STS™ or STS™/RR only	3
Soybean, Conventional or Glyphosate resistant	16
Sugarcane	3
Tobacco (transplanted)	16
Tomato (transplanted)	16
Wheat, winter	10
All other crops	18*
Precaution:	
<ul style="list-style-type: none"> • *Field Bioassay. After the above interval take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop in the collected soil and allow to grow for three weeks. If, at the end of three weeks, there are no adverse effects on root and shoot growth of the intended rotational crop, when comparing plants on treated and untreated soil, the intended rotational crop can be planted with good growing conditions. 	

5.2.4 Rotational Crop Restrictions Following Sugarcane

The following crops may be planted at the specified interval and rate following the application of Envoke Herbicide to Sugarcane.

Rotational Crop	Plant-Back Interval in Months		
	Maximum Rate Applied Per Year		
	0.4 oz/A	0.9 oz/A	1.5 oz/A
Bell Pepper (transplanted)	12*	12*	12*
Cabbage	12*	12*	12*
Celery	9	12*	12*
Chinese Cabbage	9	9*	12*
Cilantro (FL only)	9	9*	12*
Cotton	7	12	12
Corn, field	7	12	12
Corn, sweet	7	12	12
Lettuce	12	12*	12*
Parsley	9	9*	12*
Potato, Irish	12*	12*	12*
Radish	9	12*	12*
Rice	7	7	9
St. Augustinegrass sod	7	7*	9*
Snap Bean	7	9*	9
Soybean	7	9*	9*
Spinach	9	12*	12*
Tomato (transplanted)	3	12	12
Wheat, winter	3	5	7
All other crops	18*	18*	18*

Precaution:

- *Field Bioassay. After the above interval take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop in the collected soil and allow to grow for three weeks. If, at the end of three weeks, there are no adverse effects on root and shoot growth of the intended rotational crop, when comparing plants on treated and untreated soil, the intended rotational crop can be planted with good growing conditions.

5.2.5 Rotational Crop Restrictions Following Transplanted Tomato

The following crops may be planted at the specified interval following application of Envoke Herbicide to Transplanted Tomato Crops.

Rotational Crop	Plant-Back Interval in Days
Bell Pepper (transplanted)	360
Cotton	30
Corn, field	210
Corn, sweet	210
Cucurbits (transplanted)	540
Grain sorghum	210
Parsley	360*
Peanut	210

Potato, Irish	360*
Radish	360*
Rice	210
Soybean	210
Sugarcane	30
Tobacco (transplanted)	210
Tomato (transplanted)	90
Wheat, winter	90
All other crops	540*
Precaution:	
<ul style="list-style-type: none"> *Field Bioassay. After the above interval take soil samples to a depth of 6 inches (preferably in a solid core) from several locations within the field as well as the untreated area. Plant the intended rotational crop in the collected soil and allow to grow for three weeks. If, at the end of three weeks, there are no adverse effects on root and shoot growth of the intended rotational crop, when comparing plants on treated and untreated soil, the intended rotational crop can be planted with good growing conditions. 	

6.0 COVER CROPS

A cover crop can be an important tool for the overall farm cropping system. Cover crops are planted for conservation purposes, soil erosion control, soil health improvement, water quality improvement and weed management. A cover crop can be a single crop or a combination of crops, including grasses and/or broadleaf crops.

After harvest of an Envoke Herbicide treated crop, planting of a cover crop is allowed provided the cover crop is not grazed or fed to livestock nor harvested for food. Terminate the cover crop through natural causes including frost or intentional termination by herbicide application, crimping, rolling, tillage or cutting.

All possible cover crops or cover crop combinations have not been tested for its sensitivity to this product. Before planting the cover crop, determine the level of sensitivity for the intended cover crops by conducting a field bioassay. Refer to **Section 6.1** for instructions on how to conduct a field bioassay.

6.1 Field Bioassay for Cover Crops

A field bioassay is a method of determining if herbicide residues are present in the soil at concentrations high enough to adversely affect crop growth.

Conduct the field bioassay by planting several strips of the desired cover crop across the field which has been previously treated with Envoke Herbicide. Plant the cover crop strips perpendicular to the direction of the product application. Locate the strips so that all the different field conditions are encountered, including differences in field terrain, soil texture, organic matter, pH, and drainage.

If the cover crop does not show adverse effects including crop injury and/or stand reduction, the field can be planted to this cover crop. If injury and/or stand reduction are visible, wait two to four weeks for further herbicide degradation to occur and repeat the bioassay.

Alternatively, select a different cover crop and repeat the bioassay. Only plant cover crops that show acceptable resilience in the field bioassay.

7.0 RESTRICTIONS AND PRECAUTIONS

7.1 Use Restrictions

- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply Envoke Herbicide aerially.
- **DO NOT** apply Envoke Herbicide using liquid fertilizer as the carrier.
- **DO NOT** use a sprayer or applicator contaminated with any other materials, or crop damage or clogging of the application device may result.
- **DO NOT** use liquid fertilizer as the carrier.
- **DO NOT** let the spray mixture stand overnight in the spray tank.
- **DO NOT** use chlorine-based spray tank cleaners, including Clorox®.

7.2 Use Precautions

- This pesticide is toxic to vascular plants and must be used strictly in accordance with the drift precautions in **Sections 4.5 and 4.6** in order to minimize off-site exposures.
- Avoid large spray overlaps that result in excessive rates in the overlap areas.
- Avoid application under conditions when uniform coverage cannot be obtained or when spray drift may occur.
- The minimum specified nozzle height must be used to help avoid spray drift.
- Drift may cause damage to any non-target vegetation.
- Avoid all direct or indirect contact (including spray drift) of this product with crops other than those specified for treatment on this label, since injury may occur.
- Degradation of Envoke Herbicide in the soil is enhanced by soil with pH <7 and moist conditions.
- Application of Envoke Herbicide to soils with pH exceeding 7.5 may increase the potential for rotational crop injury and may reduce rotational crop yield.
- Alkaline soils increase the potential for injury to rotational crops.

8.0 WEEDS CONTROLLED OR PARTIALLY CONTROLLED

Weeds controlled by Envoke Herbicide are listed in **Sections 8.1-8.5** provided below.

In the sections below, C is defined as Control (85-100%), S is defined as Suppression.

PARTIAL WEED CONTROL

Where reference is made to weed suppression, suppression means significant activity but not always at a level considered acceptable for commercial weed control.

8.1 Citrus (crop group 10)

Common Name	Scientific Name	Control Level	Postemergence Rate (0.2 oz/A)	Postemergence Rate (0.4 oz/A)
			Weed Size Ranges for Optimum Control (Inches)	
Alligatorweed	<i>Alternanthera philoxeroides</i>	C	1-4	1-6
Dayflower, Asiatic	<i>Commelina communis</i>	S	1-4	1-4
Barnyardgrass	<i>Echinochloa crus-galli</i>	S	0.25-1	0.25-1
Starbur, Bristly	<i>Acanthospermum hispidum</i>	C	1-4	1-6
Panicum, Broadleaf	<i>Panicum adspersum</i>	C	1-4	1-6
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>	S	0.25-1	0.25-1
Carpetweed	<i>Mollugo vertillata</i>	C	0.5-2	0.5-3
Cocklebur, Common	<i>Xanthium strumarium</i>	C	1-6	1-8
Senna, Coffee	<i>Cassia occidentalis</i>	C	1-5	1-6
Corn, Volunteer (non-IT/IR)	<i>Zea mays</i>	C	1-5	1-6
Cudweed, Wandering	<i>Gnaphalium pennsylvanicum</i>	C	1-4	1-6
Dogfennel	<i>Eupatorium cappilliflorum</i>	C	1-4	1-4
Panicum, Fall	<i>Panicum dichotomiflorum</i>	S	1-4	1-6
Beggarweed, Florida	<i>Desmodium tortuosum</i>	C	1-4	1-5
Guineagrass	<i>Panicum maximum</i>	S	1-4	1-4
Purslane, Horse	<i>Trianthema portulacastrum</i>	C	1-4	1-6
Sesbania, Hemp	<i>Sesbania exaltata</i>	C	1-4	1-5
Itchgrass	<i>Rottboellia cochinchinensis</i>	C	1-4	1-4
Johnsongrass (seedling)	<i>Sorghum halepense</i>	C	1-6	1-8
Johnsongrass (rhizome)	<i>Sorghum halepense</i>	S	4-10	4-10
Lambsquarters, Common	<i>Chenopodium album</i>	C	0.5-2	0.5-3
Marestail/Horseweed	<i>Conyza canadensis</i>	S	1-3	1-4
Morningglory:				

Common Name	Scientific Name	Control Level	Postemergence Rate (0.2 oz/A)	Postemergence Rate (0.4 oz/A)
			Weed Size Ranges for Optimum Control (Inches)	
Entireleaf	<i>Ipomoea hederacea</i> <i>var integriuscula</i>	C	1-4	1-5
Ivyleaf	<i>Ipomeoa hederacea</i>	C	1-5	1-6
Pitted	<i>Ipomoea lacunose</i>	C	1-5	1-6
Scarlet	<i>Ipomoea coccinea</i>	C	1-4	1-4
Tall	<i>Ipomoea purpurea</i>	C	1-3	1-4
Nutsedge:				
Yellow	<i>Cyperis esculentus</i>	C	1-6	1-6
Purple	<i>Cyperus rotundus</i>	C	1-6	1-6
Peanut, Volunteer	<i>Arachis hypogaea</i>	S	1-2	1-3
Pigweed:				
Palmer	<i>Amaranthus palmeri</i>	C	1-6	1-8
Redroot	<i>Amaranthus retroflexus</i>	C	1-6	1-8
Smooth	<i>Amaranthus hybridus</i>	C	1-6	1-8
Spiny	<i>Amatanthus spinosus</i>	C	1-6	1-8
Waterhemp, Tall	<i>Amaranthus tubercalatus</i>	S	1-2	1-2
Ragweed, Common	<i>Ambrosia artemisiifolia</i>	C	1-4	1-6
Redweed	<i>Melochia corchorifolia</i>	C	0.5-2	0.5-3
Ryegrass	<i>Lolium spp.</i>	C	1-2	-1-2
Sicklepod	<i>Senna obtusifolia</i>	C	1-8	1-8
Spanishneedles	<i>Bidens bipinnata</i>	C	1-4	1-6
Spurge	<i>Euphorbia spp.</i>	C	1-2	-1-2
Soybean, Volunteer (non-STS)	<i>Glycine max</i>	C	1-3	1-4
Sunflower, Common	<i>Helianthis annus</i>	C	1-4	1-5
Toadflax, Old Field	<i>Linaia canadensis</i>	C	1-4	1-6
Velvetleaf	<i>Abutilon theophrasti</i>	C	1-4	1-4
Poinsettia, Wild	<i>Euphorbia heterophylla</i>	C	0.5-2	0.5-3

Precautions:

- Common cocklebur, Palmer Pigweed, Redroot Pigweed, Smooth Pigweed, Tall Waterhemp and Common Sunflower contain certain biotypes of this weed are known to be resistant to ALS herbicides. Envoke Herbicide will not control these biotypes.
- Entire Morningglory, Ivyleaf Morningglory, Pitted Morningglory, Scarlet Morningglory, Tall Morningglory, and Nutsedge are best controlled and if treated at 1-2 leaf stage of weed growth.
- Velvetleaf may require higher rates or repeated applications of Envoke Herbicide to control.

8.2 Cotton

Common Name	Scientific Name	Control Level	Control Level in AZ/NM only	Over-the-Top Directed Rate (0.1 oz/A)	Enhanced Over-the-Top or Standard Directed Rate (0.15 oz/A)	Enhanced Directed Rate (0.25 oz/A)
				Weed Size Ranges of Optimum Control (inches)		
Barnyardgrass	<i>Echinochloa crus-galli</i>	S	S	0.25-0.5	0.25-1	0.25-1
Starbur, Bristly	<i>Acanthospermum hispidum</i>	C	NA	1-2	1-4	1-6
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>	S	NA	0.25-0.5	0.25-1	0.25-1
Carpetweed	<i>Mollugo vertillata</i>	C	C	0.5-1	0.5-2	0.5-3
Cocklebur, Common	<i>Xanthium strumarium</i>	C	S	1-4	1-5	1-6
Senna, Coffee	<i>Cassia occidentalis</i>	C	S	1-4	1-5	1-6
Corn, Volunteer (non-IT/IR)	<i>Zea mays</i>	C	S	1-4	1-5	1-6
Beggarwood, Florida	<i>Desmodium tortuosum</i>	C	NA	1-3	1-4	1-5
Purslane, Horse	<i>Trianthema portulacastrum</i>	S	S		0.5-1	0.5-2
Sesbania, Hemp	<i>Sesbania exaltata</i>	C	NA	1-3	1-4	1-5
Johnsongrass (seedling)	<i>Sorghum halepense</i>	C	C	1-2	1-4	1-6
Lambsquarters, Common	<i>Chenopodium album</i>	C	C	0.5-1	0.5-2	0.5-3
Marestail/Horseweed	<i>Conyza canadensis</i>	S	S	1-2	1-3	1-4
Mexicanweed	<i>Caspersonia castaniifolia</i>	S	S	1-2	1-2	1-2
Morningglory:						
Entireleaf	<i>Ipomoea hederacea</i> var <i>intfriuscula</i>	C	S	1-2	1-4	1-5
Ivyleaf	<i>Ipomoea hederacea</i>	C	C	1-4	1-5	1-6
Pitted	<i>Ipomoea lacunosa</i>	C	C	1-4	1-5	1-6
Tall	<i>Ipomoea purpurea</i>	C	S	1-2	1-3	1-4
Nutsedge:						
Yellow	<i>Cyperus esculentus</i>	C	S	2-6	2-6	2-6
Purple	<i>Cyperus rotundus</i>	S	S	2-3	2-4	2-4
Peanut, Volunteer	<i>Arachis hypogaea</i>	S	NA		1-2	1-3
Pigweed:						
Redroot	<i>Amaranthus retroflexus</i>	C	C	1-3	1-4	1-5
Smooth	<i>Amaranthus hybridus</i>	C	C	1-3	1-4	1-5
Waterhemp, Tall	<i>Amaranthus tuberculatus</i>	S	NA	1-2	1-2	1-2
Ragweed, Common	<i>Ambrosia artemisiifolia</i>	C	NA	1-2	1-4	1-6

Common Name	Scientific Name	Control Level	Control Level in AZ/NM only	Over-the-Top Directed Rate (0.1 oz/A)	Enhanced Over-the-Top or Standard Directed Rate (0.15 oz/A)	Enhanced Directed Rate (0.25 oz/A)
				Weed Size Ranges of Optimum Control (inches)		
Redweed	<i>Melochia corchorifolia</i>	C	NA	0.5-1	0.5-2	0.5-3
Sicklepod	<i>Senna obtusifolia</i>	C	NA	1-3	1-4	1-6
Smellmelon	<i>Cucumis melo</i>	S	NA	1-3	1-4	1-4
Soybean, Volunteer (non-STS)	<i>Glycine max</i>	C	S	1-2	1-3	1-4
Sunflower, Common	<i>Helianthus annuus</i>	C	NA	1-3	1-4	1-5
Sunflower, Prairie	<i>Helianthus petiolaris</i>	C	NA	1-3	1-4	1-5
Velvetleaf	<i>Abutilon theophrasti</i>	C	NA	1-4	1-4	1-4
Poinsettia, Wild	<i>Euphorbia heterophylla</i>	C	NA	0.5-1	0.5-2	0.5-3
Croton, Woolly	<i>Croton cepitatus</i>	S	NA	1-2	1-2	1-2

Precautions:

- Common Cocklebur, Redroot Pigweed, Smooth Pigweed, Tall Waterhemp, and Common Sunflower contain certain biotypes of this weed are known to be resistant ALS herbicides. Envoke Herbicide will not control these biotypes
- Entireleaf Morningglory, Ivyleaf Morningglory, Pitted Morningglory, Tall Waterhemp, and Common Sunflower are best controlled if treated at 1-2 leaf stage of weed growth.
- Irrigation and/or rainfall prior to treatment of Nutsedge may improve efficacy.
- Yellow Nutsedge, Redroot Pigweed, Smooth Pigweed, Prairie Sunflower, and Velvetleaf may require higher rates or repeated applications of Envoke Herbicide to control.

8.3 Fall-Applied Fallow Seed Beds

Common Name	Scientific Name	Control Level
Bittercress, Smallflowered	<i>Cardamine parviflora</i>	C
Bluegrass, Annual	<i>Poa annua</i>	C
Buttercup, Corn	<i>Ranunculus arvensis</i>	S
Buttercup, Crowfoot	<i>Ranunculus scleratus</i>	S
Buttercup, Hairy	<i>Ranunculus sardous</i>	S
Chickweed, Common	<i>Stellaria media</i>	C
Chickweed, Mouseear (seedling)	<i>Cerastium vulgatum</i>	C
Deadnettle, Purple	<i>Lamium purpureum</i>	C
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>	C
Henbit	<i>Lamium amplexicaule</i>	C
Marestail/Horseweed	<i>Conyza Canadensis</i>	C
Mustard, Black	<i>Brassica nigra</i>	C
Mustard, Wild	<i>Brassica kaber</i>	C
Radish, Wild	<i>Raphanus raphanistrum</i>	C
Shepard's Purse	<i>Capsella bursa-pastoris</i>	C

Common Name	Scientific Name	Control Level
Sowthistle, Spiny	<i>Sonchus asper</i>	C
Swinecress	<i>Coronpus didymus</i>	S
Vetch, Common	<i>Vicia sativa</i>	C

8.4 Sugarcane

Common Name	Scientific Name	Control Level	Postemergence Rate (0.3 oz/A)	Postemergence Rate (0.3-0.6 oz/A)
			Weed Size Ranges for Optimum Control (Inches)	
Alligatorweed	<i>Alternanthera philoxeroides</i>	C	1-4	1-6
Dayflower, Asiatic	<i>Commelina communis</i>	S	1-4	1-4
Barnyardgrass	<i>Echinochla crus-galli</i>	S	0.25-1	0.25-1
Starbur, Bristly	<i>Acanthospermum hispidum</i>	C	1-4	1-6
Panicum, Broadleaf	<i>Panicum adspersum</i>	C	1-4	1-6
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>	S	0.25-1	0.25-1
Carpetweed	<i>Mollugo vertillata</i>	C	0.5-2	0.5-3
Cocklebur, Common	<i>Xanthium strumarium</i>	C	1-6	1-8
Senna, Coffee	<i>Cassia occidentalis</i>	C	1-5	1-6
Corn, Volunteer (non-IT/IR)	<i>Zea mays</i>	C	1-5	1-6
Cudweed, Wandering	<i>Gnaphalium pensylvanicum</i>	C	1-4	1-6
Dogfennel	<i>Eupatorium cappilliforium</i>	C	1-4	1-4
Panicum, Fall	<i>Panicum dichotomiflorum</i>	S	1-4	1-6
Beggarweed, Florida	<i>Desmodium tortuosum</i>	C	1-4	1-5
Pellitory, Florida	<i>Parietaria floridanda</i>	C	1-4	1-5
Guineagrass	<i>Panicum maximum</i>	S	1-4	1-4
Purslane, Horse	<i>Trianthema portulacastrum</i>	C	1-4	1-6
Sesbania, Hemp	<i>Sesbania exaltata</i>	C	1-4	1-5
Itchgrass	<i>Rottboellia cochinchinensis</i>	C	1-4	1-4
Johnsongrass (seedling)	<i>Sorghum halepense</i>	C	1-6	1-8
Johnsongrass (rhizome)	<i>Sorghum halepense</i>	S	4-10	4-10
Lambsquarters, Common	<i>Chenopodium album</i>	C	0.5-2	0.5-3
Marestail/Horseweed	<i>Conyza Canadensis</i>	S	1-3	1-4
Morningglory:				
Entireleaf	<i>Ipomoea hederacea</i> var <i>integriuscula</i>	C	1-4	1-5
Ivyleaf	<i>Ipomoea hederacea</i>	C	1-5	1-6
Pitted	<i>Ipomoea lacunose</i>	C	1-5	1-6
Scarlet	<i>Ipomoea coccinea</i>	C	1-4	1-4
Tall	<i>Ipomoea purpurea</i>	C	1-3	1-4

Common Name	Scientific Name	Control Level	Postemergence Rate (0.3 oz/A)	Postemergence Rate (0.3-0.6 oz/A)
			Weed Size Ranges for Optimum Control (Inches)	
Nutsedge: Yellow Purple	<i>Cyperis esculentus</i>	C	1-6	1-6
	<i>Cyperus rotundus</i>	C	1-6	1-6
Peanut, Volunteer	<i>Arachis hypogaea</i>	S	1-2	1-3
Pigweed: Palmer Redroot Smooth Spiny	<i>Amaranthus palmeri</i>	C	1-6	1-8
	<i>Amaranthus retroflexus</i>	C	1-6	1-8
	<i>Amaranthus hybridus</i>	C	1-6	1-8
	<i>Amatanthus spinosus</i>	C	1-6	1-8
Waterhemp, Tall	<i>Amaranthus tubercalatus</i>	S	1-2	1-2
Ragweed, Common	<i>Ambrosia artemisiifolia</i>	C	1-4	1-6
Redweed	<i>Melochia corchorifolia</i>	C	0.5-2	0.5-3
Sicklepod	<i>Senna obtusifolia</i>	C	1-8	1-8
Spanishneedles	<i>Bidens bipinnata</i>	C	1-4	1-6
Soybean, Volunteer (non-STS)	<i>Glycine max</i>	C	1-3	1-4
Sunflower, Common	<i>Helianthis annus</i>	C	1-4	1-5
Toadflax, Old Field	<i>Linaia canadensis</i>	C	1-4	1-6
Velvetleaf	<i>Abutilon theophrasti</i>	C	1-4	1-4
Poinsettia, Wild	<i>Euphorbia heterophylla</i>	C	0.5-2	0.5-3

Precautions:

- Velvetleaf may require use of higher rates or repeated applications of Envoke Herbicide to achieve control.
- Common Cocklebur, Palmer Pigweed, Redroot Pigweed, Smooth Pigweed, Tall Waterhemp, and Common Sunflower contain certain biotypes of this weed are known to be resistant to ALS herbicides. Envoke Herbicide will not control these biotypes.
- Entireleaf Morningglory, Ivyleaf Morningglory, Pitted Morningglory, Scarlet Morningglory, Tall Morningglory, and Nutsedge are best controlled if treated at 1-2 leaf stage of weed growth.

8.5 Tomato

Common Name	Scientific Name	Control Level	Rate (0.1 oz/A)	Rate (0.15 oz/A)	Rate (0.2 oz/A)
			Weed Size Ranges for Optimum Control (Inches)		
Barnyardgrass	<i>Echinochloa crus-galli</i>	S	0.25-0.5	0.25-1	0.25-1
Starbur, Bristly	<i>Acanthospermum hispidum</i>	C	1-2	1-4	1-6
Signalgrass, Broadleaf	<i>Brachiaria platyphylla</i>	S	0.25-0.5	0.25-1	0.25-1
Carpetweed	<i>Mollugo vertillata</i>	C	0.5-1	0.5-2	0.5-3
Cocklebur, Common	<i>Xanthium strumarium</i>	C	1-4	1-5	1-6
Senna, Coffee	<i>Cassia occidentalis</i>	C	1-4	1-5	1-6
Corn, Volunteer (non-IT/IR)	<i>Zea Mays</i>	C	1-4	1-5	1-6
Beggarwood, Florida	<i>Desmodium tortuosum</i>	C	1-3	1-4	1-5
Purslane, Horse	<i>Trianthema portulacastrum</i>	S	-	0.5-1	0.5-2
Sesbania, Hemp	<i>Sesbania exaltata</i>	C	1-3	1-4	1-5
Johnsongrass (seedling)	<i>Sorgham helepense</i>	C	1-2	1-4	1-6
Lambsquarters, common	<i>Chemopodium album</i>	C	0.5-1	0.5-2	0.5-3
Marestail/Horse-weed	<i>Conyza Canadensis</i>	S	1-2	1-3	1-4
Morningglory:					
Entireleaf	<i>Ipomoea heracea</i> <i>var integriuscula</i>	C	1-2	1-4	1-5
Ivyleaf	<i>Ipomoea hederacea</i>	C	1-4	1-5	1-6
Pitted	<i>Ipomoea lacunose</i>	C	1-4	1-5	1-6
Tall	<i>Ipomoea purpurea</i>	C	1-2	1-3	1-4
Nutsedge:					
Yellow	<i>Cyperus esculentus</i>	C	2-6	2-6	2-6
Purple	<i>Cyperus rotundus</i>	S	2-3	2-4	2-4
Peanut, Volunteer	<i>Arachis hypoeaea</i>	S	-	1-2	1-3
Pigweed:					
Palmer	<i>Amaranthus palmeri</i>	S	1-2	1-2	1-2
Redroot	<i>Amaranthus retroflexus</i>	C	1-3	1-4	1-6
Smooth	<i>Amaranthus hybridus</i>	C	1-3	1-4	1-5
Waterhemp, Tall	<i>Amaranthus tuberculatus</i>	S	1-2	1-2	1-2
Ragweed, Common	<i>Ambrosia artemisiifolia</i>	C	1-2	1-4	1-6
Redweed	<i>Melochia corchorifolia</i>	C	0.5-1	0.5-2	0.5-3
Sicklepod	<i>Senna obtusifolia</i>	C	1-3	1-4	1-6
Soybean, Volunteer (non-STs)	<i>Glycine max</i>	C	1-2	1-3	1-4
Sunflower, Common	<i>Helianthus annuus</i>	C	1-3	1-4	1-5
Velvetleaf	<i>Abutilon theophrasti</i>	C	1-4	1-4	1-4

Common Name	Scientific Name	Control Level	Rate (0.1 oz/A)	Rate (0.15 oz/A)	Rate (0.2 oz/A)
			Weed Size Ranges for Optimum Control (Inches)		
Poinsettia, Wild	<i>Euphorbia heterophylla</i>	C	0.5-1	0.5-2	0.5-3
<p>Precautions:</p> <ul style="list-style-type: none"> • Johnsongrass (seedling), Yellow Nutsedge, Redroot Pigweed, Smooth Pigweed, and Velvetleaf may require use of higher rates of repeated applications if Envoke Herbicide to achieve control. • Common Cocklebur, Palmer Pigweed, Redroot Pigweed, Smooth Pigweed, Tall Waterhemp, and Common Sunflower contain certain biotypes of this weed are known to be resistant to ALS herbicides. Envoke Herbicide will not control these biotypes. • Entireleaf Morningglory, Ivyleaf Morningglory, Pitted Morningglory, and Tall Morningglory are best controlled if treated at 1-2 leaf stage of weed growth. Improved control may be achieved using Dual Magnum® preemergence followed by Envoke Herbicide. • Envoke Herbicide will provide control of emerged yellow nutsedge at 0.10 oz/A if S-Metolachlor used preemergence under plastic. 					

9.0 CROP USE DIRECTIONS

9.1 Citrus (crop group 10)

9.1.1 Preemergence and Postemergence Weed Control in Established Citrus Orchards in AZ, FL, GA and TX

Crops (crop group 10) (including cultivars, varieties, and/or hybrids)			
Calamondin, Citrus citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange, sour, Orange, sweet, Pummelo, Satsuma mandarin			
Target Weeds	Rate (oz/A) (see Table 12.1 for lb A/A equivalent)	Application Timing	Use Directions
Weeds listed in Section 8.1	0.2-0.4	Preemergence	<p>Apply Envoke Herbicide to citrus trees, which are more than 1-2 years old in their final growing location and where the soil is void of cracks and is firmly settled around the roots.</p> <p>For best results with a preemergence application, apply in the fall to a clean orchard floor for control of ryegrass, lambsquarters, prostrate spurge, annual bluegrass, and hairy fleabane.</p> <p>Add to the finished spray solution either a nonionic surfactant (NIS) at 0.25% v/v or a crop oil concentrate (COC) at 0.5–1.0% v/v. See Section 4.4.5 for details on additive requirements.</p>
		Postemergence	<p>For postemergence applications, Envoke Herbicide can be tank mixed (Section 9.1.2) with glyphosate formulations registered for use in established citrus for improved initial postemergence control and improved duration of control of the weeds.</p> <p>Applications must be made to actively growing weeds at the heights specified in Section 8.1. Refer to this section for more details on rates and timing.</p> <p>When weeds are dense or large, use higher rates within the provided range.</p> <p>Apply to the orchard floor, avoiding contact with fruit, foliage and stems of citrus trees.</p> <p>Envoke Herbicide can be used as part of a glyphosate-based weed control program</p>

			in citrus for improved initial and/or residual of control of certain troublesome weeds.
Tank Mix Options:			
<ul style="list-style-type: none"> Refer to Section 9.1.2 for tank-mix options. 			
Resistance Management:			
<ul style="list-style-type: none"> Refer to Section 3.1. 			
Precaution:			
<ul style="list-style-type: none"> Avoid Envoke Herbicide application to trees weakened by or recovering from stress caused by, but not limited to drought, flood, disease, nematodes, winter injury, mechanical injury, frost, excessive fertilizer or soil salts, low fertility, or pesticides. Spray contacting citrus foliage, stems, or roots can cause crop injury. 			
USE RESTRICTIONS			
<ol style="list-style-type: none"> Refer to Section 7.1 for additional product use restrictions. Maximum Single Application: 0.4 oz/A (0.0188 lb AI/A) Minimum Application Interval: 30 days Maximum Annual Application: 1.2 oz/A/calendar year (0.0564 lb AI/A/calendar year) <ol style="list-style-type: none"> DO NOT exceed 0.056 lb ai/A/calendar year of trifloxysulfuron-sodium containing products. DO NOT apply to sand or loamy sand soils. DO NOT apply to gravelly soils. DO NOT make more than three applications per year. Cease applications 1-2 years prior to termination of orchard. Pre-harvest Interval (PHI): 14 days 			

9.1.2 Tank-Mix Combinations

Application	Tank-Mix AI (0.2 - 0.4 oz)	Use Directions
Postemergence	Paraquat Glyphosate Simazine Norflurazon	Mix 0.2-0.4 oz Envoke Herbicide with tank-mix partner. Applications must be made to actively growing weeds at the heights specified in Section 8.1 . Refer to this section for more details on rates and timing. Apply to target weeds under the tree canopy.
TANK-MIX USE RESTRICTIONS		
All use restrictions cited in Section 9.1.1 for Envoke Herbicide solo apply to tank mixes with Envoke Herbicide		

9.2 Cotton

9.2.1 Postemergence Over-the-Top and Post-Directed Applications

Target Weeds	Rate (oz/A) (see Table 12.1 for lb A/A equivalent)	Application Timing	Use Directions
Weeds listed in Section 8.2	0.10-0.15	Postemergence Over-the-Top	<p>Picker Type Varieties Only For use in AL, AR, AZ, FL, GA, KS, KY, LA, MO [Bootheel], MS, NC, SC, TN.</p> <p>Also for use in Zones 1, 2 and 3 as defined in the inserted table below.</p> <p>Refer below for a map of the Geographical Zones.</p> <p>Apply Envoke Herbicide when cotton has reached a minimum of 5 true leaves.</p> <p>Add a high quality nonionic surfactant (NIS) to the finished spray solution at 0.25% v/v. See Section 4.4.5 for details on additive requirements.</p>
		Post-directed	<p>Picker/Stripper/Pima Type Varieties AZ only For optimum weed control, irrigation must be made prior to Envoke Herbicide application to ensure the weeds are not under stress from lack of moisture. Best results are usually obtained when application is made within 7 days after irrigation. This is particularly important if the target weed is nutsedge. Nutsedge must not exceed 6 inches in height at the time of application.</p> <p>Add to the finished Envoke Herbicide spray solution either a nonionic surfactant (NIS) at 0.25% v/v or crop oil concentrate (COC) at 0.5-1.0% v/v. See Section 4.4.5 for details on additive requirements.</p> <p>MSMA, S-Metolachlor, glyphosate (Roundup Ready cotton only), or other labeled herbicides may be required before the first irrigation to keep nutsedge from exceeding 6 inch height at the appropriate timing for Envoke Herbicide.</p> <p>Application of a registered preemergence or early postemergence herbicide is advised prior to the post-directed application of Envoke Herbicide. This will reduce weed competition and facilitate cotton achieving a height advantage over targeted weeds.</p>

Weeds listed in Section 8.2		Post-directed	<p>Picker/Stripper Type Varieties</p> <p>For use in Zone 2 and Zone 3 as defined in the inserted table below.</p> <p>Refer to below for a map of the geographical Zones. Add to the finished spray solution either a nonionic surfactant (NIS) at 0.25% v/v or a crop oil concentrate (COC) at 0.5-1.0% v/v. See Section 4.4.5 for details on additive requirements.</p> <p>Apply once cotton is large enough to adequately direct applications (usually 6 inches in height or above). Adjust spray to minimize contact with cotton terminal and foliage while directing the application to maximize contact with weeds. Good coverage is essential for optimum weed control.</p> <p>Early season weed control with the use of a registered preemergence or early postemergence herbicide is advised prior to the post-directed application of Envoke Herbicide. This will reduce weed competition and allow cotton to achieve a height advantage over targeted weeds.</p>
	0.10-0.25	Post-directed	<p>Picker/Stripper Type Varieties</p> <p>For use in AL, AR, FL, GA, KS, KY, LA, MO [Bootheel], MS, NC, SC, TN, VA.</p> <p>For use in Zone 1 as defined in the inserted table below.</p> <p>Refer below for a map of the geographical Zones.</p> <p>Add to the finished spray solution either a nonionic surfactant (NIS) at 0.25% v/v or a crop oil concentrate (COC) at 0.5-1.0% v/v. See Section 4.4.5 for details on additive requirements.</p> <p>Apply once cotton is large enough to adequately direct applications (usually 6 inches in height or above).</p> <p>Adjust spray to minimize contact with cotton terminal and foliage while directing the application to maximize contact with weeds. Good coverage is essential for optimum weed control.</p> <p>Early season weed control with the use of a registered preemergence or early postemergence herbicide is advised prior to the post-directed application of Envoke Herbicide. This will reduce weed competition and allow cotton to achieve a height advantage over targeted weeds.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> To minimized crop response, Envoke Herbicide must not be applied if cotton is under severe stress due to drought, cold weather, hail, flooding, waterlogged soils, compacted soil, disease, insect damage, nutrient deficiency, or other causes. 			

- Postemergence over-the-top applications of Envoke Herbicide to picker type cotton varieties can occasionally result in yellowing of leaves and/or stacking of plant internodes. Symptoms may persist for a short period of time but will not reduce cotton yield.
- Applications of Envoke Herbicide may result in reduced weed control if weeds are under severe stress for drought or if weeds are taller than the optimum heights listed in **Section 5.2.2**.
- Cotton plants parts exposed to the herbicide spray may exhibit chlorosis or necrosis.
- If severe drought conditions develop (less than 12 inches of rainfall/irrigation within the first 5 month following application of Envoke Herbicide and/or less than 1 inch of rainfall/irrigation within the first month after application), rotational crop injury may occur.

Geographical Zone	Geographical Description
Zone 1	OK and TX [East of I-35]
Zone 2	TX [West of I-35, East of State Highway 83, South of I-20]
Zone 3	NM, OK [West of I-35] and TX [West of I-35, excluding Zones 2 and 4]
Zone 4	TX [Within the area bordered by I-20 and I-10 and State Highway 83]

Tank-Mix Options:

Refer to **Section 9.2.2** for tank-mix options.

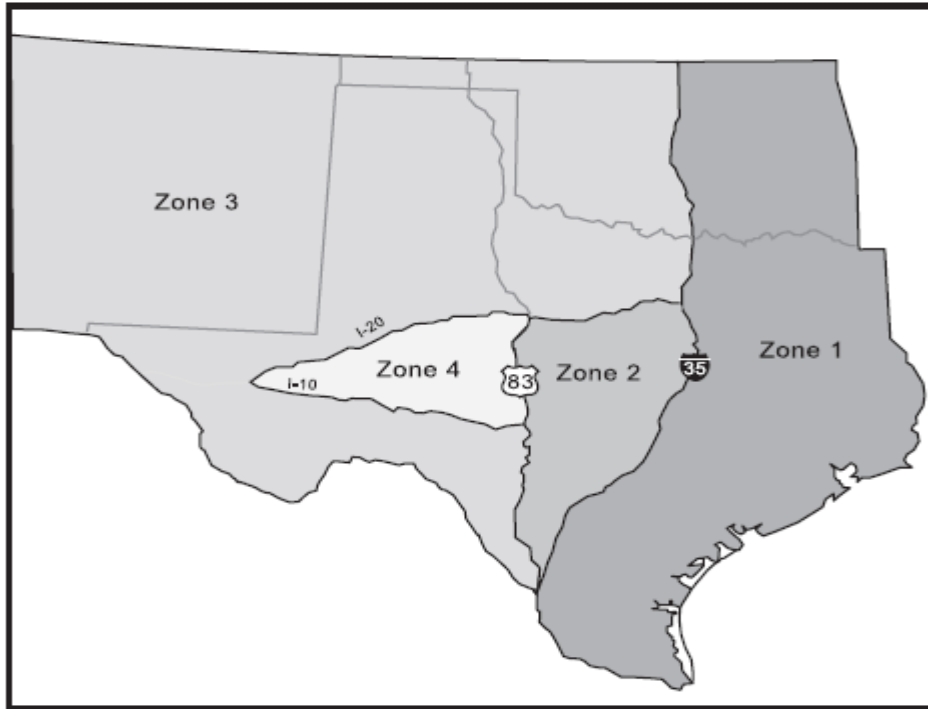
Resistance Management:

Refer to **Section 3.1**.

USE RESTRICTIONS

- 1) Refer to **Section 7.1** for additional product use restrictions.
- 2) **Maximum Single Application:** Zone 1: 0.25 oz/A (0.0118 lb AI/A); Zones 2 and 3: 0.15 oz/A (0.007 lb AI/A)
- 3) **Minimum Application Interval:** 14 days
- 4) **Maximum Annual Application in Zones 1 and 2:** 0.4 oz/A/calendar year (0.0188 lb AI/A/calendar year)
 - a) **DO NOT** exceed a total of 0.0188 lb ai/A/calendar year of trifloxysulfuron-sodium containing products.
- 5) **Maximum Annual Rate in Zone 3:** 0.15 oz/A/calendar year (0.007 lb AI/A/calendar year).
 - a) **DO NOT** exceed a total 0.007 lb ai/A/calendar year of trifloxysulfuron-sodium containing products.
- 6) **DO NOT** use in cotton in two consecutive years.
- 7) **DO NOT** make more than one application per year in Zone 3.
- 8) **DO NOT** make more than two applications per year in Zones 1 and 2.
- 9) **DO NOT** apply more than one post-directed application per year in Zones 1 and 2.
- 10) **DO NOT** apply in Zone 4.
- 11) **Pre-harvest Interval (PHI):** 60 Days

Geographical Map of Application Zones for Use of Envoke Herbicide in Cotton in NM, OK, and TX



9.2.2 Tank-Mix Combinations

Applications	Tank Mix AI	Use Directions
All conventional cotton varieties with hooded sprayers	Glyphosate	Completely enclose the spray pattern for weed control between rows. Adjust the hooded sprayer in raised seedbeds to ensure the front and rear flaps touch the ground to completely enclose the spray solution.
Postemergence over-the-top or Post-Directed Applications to cotton containing resistance to glyphosate	Glyphosate approved for use on glyphosate resistant cotton	Apply from 5-12 leaf stage to 60 days prior to harvest. Apply with Envoke Herbicide at 0.1-0.15 oz/A.
Postemergence over-the-top and Post-Directed Applications	Mepiquat Chloride	
Postemergence over-the-top and insect control	Abamectin Thiamethoxam Emamectin benzoate Abamectin Acetamiprid Lambda-cyhalothrin Imidaclopyrid	

Applications	Tank Mix AI	Use Directions
Postemergence over-the-top or post-directed for control of smallflower morningglory and cypressvine morningglory	Pyrithiobac sodium	
Postemergence over-the-top Salvage Treatment to cotton containing resistance to glyphosate where weeds threaten to cause crop loss	Glyphosate	
Directed Applications	Prometryn Fluometuron S-Metolachlor MSMA Pyrithiobac sodium	
Post-Directed Applications in BXN Cotton Varieties	Bromoxynil and Atrazine	
<p>Precautions:</p> <ul style="list-style-type: none"> • Tank mixing Envoke Herbicide with any Emulsifiable Concentrate (EC) formulated product may increase crop injury potential. • To avoid crop injury, apply malathion-containing insecticides at least 24 hours before or after the application of Envoke Herbicide. • Envoke Herbicide will antagonize the grass activity of the postemergence grass herbicides including sethoxydim, clethodim, fenoxaprop, fluazifop, quizalofop-p-ethyl etc. • Occasionally, glyphosate resistant cotton treated with a tank-mix of Envoke Herbicide and glyphosate can develop leaf burn and bronzing while new growth may exhibit chlorosis. 		
Tank-Mix Restrictions		
<ul style="list-style-type: none"> • All use restrictions cited in Section 9.2.1 for Envoke Herbicide solo apply to tank mixes with Envoke Herbicide. • DO NOT apply postemergence over-the-top in tank mix with any other herbicide, fertilizer, or additives other than the NIS and drift control agents, unless as specified on this label or EPA approved supplemental labeling, or unacceptable injury may occur. • DO NOT tank mix Envoke Herbicide with malathion, profenofos, or unacceptable cotton injury can occur. • DO NOT tank mix Envoke Herbicide with the following gramincides; sethoxydim, clethodim, fenoxaprop, fluazifop, quizalofop-p-ethyl etc. Application within 7 days before or after an application of Envoke Herbicide will result in unacceptable grass control. Grass weed antagonism has not been observed with glyphosate products. • DO NOT use <u>mepiquat chloride</u> if cotton crop is under stress resulting for weather, herbicide, insect, mite, nematode, disease, or soil fertility. 		

9.3 Fall-Applied Fallow Seedbeds

9.3.1 Fall-Applied Fallow Seedbeds

Target Weeds	Rate (oz/A) (see Table 12.1 for lb AI/A equivalent)	Application Timing	Use Directions
Weeds listed in Sections 8.3.	0.10-0.15	Application of Envoke Herbicide alone must be made preemergence to the weeds.	For use in: AL, AR, FL, GA, IL [South of I-70], IN [South of I-70], KS [South of I-70, East of US Highway 281], KY, LA, MO, [South of I-70], MS, NC, SC, TN, VA, and OK/TX [East of I-35]
Tank-Mix Options: Refer to Section 9.3.2 for tank mix options.			
Resistance Management: • Refer to Section 3.1.			
USE RESTRICTIONS			
1) Refer to Section 7.1 for additional product use restrictions. 2) Maximum Single Application: 0.15 oz/A (0.007 lb AI/A) 3) Maximum Annual Application: 0.4 oz/A/calendar year (0.0188 lb AI/A/calendar year) a) DO NOT exceed a total of 0.0188 lb ai/A trifloxysulfuron-sodium containing products. 4) Minimal Application Interval: 14 days. 5) DO NOT make more than 3 applications of Envoke Herbicide per year. 6) Preharvest Interval (PHI): Not applicable			

9.3.2 Tank-Mix Combinations

Application	Tank-Mix AIs	Use Directions
Fall Applied, Fallow Seedbed	Dicamba Paraquat Glufosinate 2,4-D Glyphosate Glyphosate	Always add 0.25% v/v NIS when using paraquat Rainfall required for activation.
TANK-MIX USE RESTRICTIONS		
All use restrictions cited in Section 9.3.1 for Envoke Herbicide solo apply to tank mixes with Envoke Herbicide.		

9.4 Sugarcane

9.4.1 Applications to Sugarcane in Puerto Rico, FL, HI, LA and TX

Target Weeds	Rate (oz/A) (see Table 12.1 for lb AI/A equivalent)	Application Timing	Use Directions
Weeds listed in Sections 8.4.	0.3	Pre-Spiking Application in Plant Sugarcane (FL only)	Apply Envoke Herbicide pre-spiking to plant sugarcane prior to spiking in FL only . Add to the finished spray solution a non-ionic surfactant (NIS) at 0.25% v/v. See Section 4.4.5 for details on additive requirements.
	0.3	Postemergence up to 24 inches tall	Apply Envoke Herbicide over-the-top to ratoon sugarcane. Add to the finished spray solution a non-ionic surfactant (NIS) at 0.25% v/v. See Section 4.4.5 for details on additive requirements.
	0.3-0.6	Postemergence from 24 inches tall up through layby	Apply Envoke Herbicide post-directed to plant or ratoon sugarcane that is 24 inches tall through layby. The spray must be directed away from the upper plant parts (whorl) so as to minimize contact with the crop, while maximizing contact with the target weeds. Add to the finished spray solution, either a non-ionic surfactant (NIS) at 0.25% v/v or a crop oil concentrate (COC) at 0.5-1.0% v/v. See Section 4.4.5 for details on additive requirements.
Tank-Mix Options: Refer to Section 9.4.2 for tank-mix options.			
Resistance Management: Refer to Section 3.1.			
Precautions: <ul style="list-style-type: none"> Postemergence over-the top applications of Envoke Herbicide can result in yellowing of sugarcane and occasionally stunting. Symptoms may persist for a short period but have no effect on sugarcane yield. 			
USE RESTRICTIONS			
1) Refer to Section 7.1 for additional product use restrictions. 2) Maximum Single Application: 0.60 oz/A (0.0282 lb AI/A) 3) Minimum Application Interval: 14 days 4) Maximum Annual Application: 1.5 oz/A/calendar year (0.0705 lb AI/A/calendar year). a) DO NOT exceed 0.0705 lb ai/A/calendar year of trifloxysulfuron-sodium containing products. 5) DO NOT make than 3 applications of Envoke Herbicide per calendar year up to a total of 1.5 oz/A per calendar year. 6) Pre-Harvest Interval (PHI): 100 days 7) DO NOT apply to sugarcane under stress due to drought, standing water, heavy insect and/or disease pressure, low soil fertility, etc.			

9.4.2 Tank-Mix Combinations

Application	Tank-Mix AIs	Use Directions
Postemergence	All registered and commonly applied herbicides in sugarcane.	Add to the finished spray solution a non-ionic surfactant (NIS) at 0.25% v/v. See Section 4.4.5 for details on additive requirements.
Post-directed	Ametryn	Consult with your local AMVAC representative or extension agent regarding the compatibility of specific tank mix combinations. Envoke Herbicide tank mixed with asulam provides a complementary broadleaf, grass, and sedge weed control spectrum.
Precautions:		
<ul style="list-style-type: none"> Reduction in weed control can occur when mixing Envoke Herbicide with atrazine and other herbicides. 		
TANK-MIX USE RESTRICTIONS		
All use restrictions cited in Section 9.4.1 for Envoke Herbicide solo apply to tank mixtures with Envoke Herbicide.		

9.5 Tomato

9.5.1 Applications on Transplanted Tomatoes

Target Weeds	Rate (oz/A) (see Table 12.1 for lb A/A equivalent)	Application Timing	Use Directions
Weeds listed in Sections 8.5.	For all uses, refer to Section 8.5 for optimal specified rates within the allowed ranges. Postemergence 0.10 - 0.15 Post-directed and row middle weed control 0.10 - 0.20	Allow at least two weeks after transplanting before making an application. Postemergence Post-Directed Follow-up treatments must be made prior to fruit set and at least 45 days prior to harvest.	Use only in AL, FL, GA, MS, NC, SC, and TN for control of weeds in transplanted tomatoes grown in plastic. Apply postemergence or post-directed to transplanted tomatoes grown in plastic for control of emerged nutsedge and other weeds in Section 8.5 . Applications must be made to actively growing weeds. Only 1 postemergence application is allowed. Any follow-up applications must be post-directed. For post-directed applications , adjust spray to avoid contact with plants. They must be sufficiently large to allow for good spray

			<p>coverage of target weeds while avoiding spray contact with the growing point of tomato plants.</p> <p>Add to the finished spray solution a non-ionic surfactant (NIS) at 0.25% v/v. See Section 4.4.5 for details on additive requirements.</p> <p>A registered preemergence herbicide including S-Metolachlor may be used for improved weed control.</p> <p>For row middle weed control: Apply Envoke to row middles in transplanted tomatoes grown in plastic either alone or as a tank mix. Refer to Section 9.5.2 for tank mix options.</p> <p>Add to the finished spray solution either a non-ionic surfactant (NIS) at 0.25% v/v or a nonphytotoxic crop oil concentrate (COC) at 0.5-1.0% v/v.</p>
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Tank-Mix Options:
Refer to **Section 9.5.2** for tank-mix options.

Resistance Management:
Refer to **Section 3.1**.

- Precautions:**
- If spray comes in contact with tomato foliage, Envoke Herbicide may cause transient yellowing, delayed growth maturity, and stunting.
 - To minimize crop response, Envoke Herbicide must not be applied if tomato plants are under severe stress due to drought, cold weather, excessive moisture, low soil fertility, compacted soils, or heavy insect/disease pressure.

USE RESTRICTIONS

- 1) Refer to **Section 7.1** for additional product use restrictions.
- 2) **Maximum Single Application Rate Broadcast:** 0.15 oz/A (0.007 lb AI/A)
- 3) **Maximum Single Application Rate Post Directed in a Single Application:** 0.20 oz/A (0.0095 lb AI/A)
- 4) **Minimal Application Interval:** 14 days.
- 5) **Maximum Annual Rate:** 0.3 oz/A/calendar year (0.0141 lb AI/A/calendar year).
 - a) **DO NOT** exceed a total 0.0141 lb ai/A/calendar year trifloxysulfuron-sodium containing products.
- 6) **DO NOT** make more than 2 applications of Envoke herbicide per year.
- 7) **DO NOT** apply Envoke Herbicide to tomatoes treated with soil-applied organophosphate insecticides.
- 8) **DO NOT** apply Envoke Herbicide within 21 days before or 7 days after a foliar organophosphate application.
- 9) **Pre-harvest Interval (PHI):** 45 days

9.5.2 Tank-Mix Combinations

Application	Tank-Mix Als	Use Directions
Row Middle Control in Transplanted Tomatoes Grown in Plastic	Carfentrazone S-Metolachlor Paraquat Sethoxydim Diquat Metribuzin Clethodim	Apply as directed according to this label and the labels of tank-mix partners. Add to the finished spray solution, either a non-ionic surfactant (NIS) at 0.25% v/v or a nonphytotoxic crop oil concentrate (COC) at 0.5-1.0% v/v. See Section 4.4.5 for details on additive requirements.
Precaution: <ul style="list-style-type: none"> Clethodim may be mixed with Envoke Herbicide but antagonism on grasses, reduced grass control will occur. 		
TANK-MIX USE RESTRICTIONS		
All use restrictions cited in Section 9.5.1 for Envoke Herbicide solo apply to tank mixes with Envoke Herbicide.		

10.0 STORAGE AND DISPOSAL

Storage and Disposal

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

Pesticide Storage: Store in a cool, dry place.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office for guidance in proper disposal methods.

Container Handling [less than or equal to 50 pounds]

Non-refillable plastic container. DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [bags]

Non-refillable plastic container. DO NOT reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [fiber drums with liners]

Non-refillable container. DO NOT reuse or refill this container. Completely empty plastic liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then offer for recycling if available or dispose of liner in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-424-9300, day or night.

11.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

The manufacturer warrants (a) that this product conforms to the chemical description on the label; and (b) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, EXCEPT WITH RESPECT TO TITLE AND TO THOSE WARRANTIES EXPRESSLY SET FORTH ABOVE, MANUFACTURER MAKES NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED

WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN TORT, CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

12.0 APPENDIX

12.1 Envoke Herbicide Equivalent Rates

Envoke Herbicide Ounces of Product/A	Pounds Trifloxysulfuron-sodium ai/A
0.10	0.0047
0.15	0.007
0.19	0.00875
0.20	0.0095
0.23	0.0105
0.25	0.0118
0.30	0.0141
0.40	0.0188
0.60	0.0282

0.90	0.0423
1.2	0.0564
1.5	0.0705

12.2 Envoke Use Summary Table

Crop or Crop Group or Subgroup with examples	Maximum Single Application Rate (oz/A)	Minimum Application Interval (days)	Pre-Harvest Interval (PHI days)	Maximum Annual Rate (oz/A)
Citrus (crop group 10)	0.4	30	14	1.2
Cotton	0.25	14	60	0.4
Fall-Applied Fallow Seedbed	0.15	14	NA	0.4
Sugarcane	0.6	14	100	1.5
Tomato, transplanted	0.2	14	45	0.3

{note to reviewer-table numbers may change on final printed label as all uses may not appear on commercial labels}

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