

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 13, 2017

Karina Castro Federal Regulatory Manager ADAMA 3120 Highwoods Blvd., Suite 100 Raleigh, NC 27604

## Subject: Label Amendment – Minor edits Product Name: Imazethapyr 240 SL EPA Registration Number: 66222-248 Application Date: 12-13-17 Decision Number: 536476

Dear Karina Castro:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, 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 the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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

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with FIFRA section 6. If you have any questions, please contact Erik Kraft by phone at 703-308-9358, or via email at <u>kraft.erik@epa.gov</u>.

Sincerely,

Info

Erik Kraft, Product Manager 24 Fungicide and Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure

Sublabel A:	Agri	Jse		
ACCEPT	ED			
12/13/201		Group	2	Herbicide
Under the Federal Insecticide, and Rodenticide Act as amende pesticide registered under EPA Reg. No. 66222-248	d, for the	ZETHAPYR 24	0 SL	

## (Alternate Brand Name: IMAZETHAPYR 2 SL, PREFACE)

Herbicide For use on Alfalfa, Clover, Peas, Beans, Peanuts and Soybeans

ACTIVE INGREDIENT:

Ammonium salt of imazethapyr (±)-2-[ 4,5-dihydro-4-methyl-4-( I-methylethyl)-	
5-oxo-IH-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid*	22.87%
OTHER INGREDIENTS:	
TOTAL:	

\*Equivalent to 21.6% or 2 pounds per U.S. gallon or 240 grams per liter of imazethapyr acid.

#### EPA Reg. No. 66222-248

Manufactured By:

EPA Est. No.

Makhteshim Agan of North America, Inc. (d/b/a ADAMA) 3120 Highwoods Blvd., Suite 100 Raleigh, NC 27604 **How can we help? 1-866-406-6262** 

NET CONTENTS: \_\_\_\_ Gallon(s)

**KEEP OUT OF REACH OF CHILDREN** 

## CAUTION/PRECAUCION

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.)

	FIRST AID								
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>								
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>								
IF INHALED	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>								
	HOT LINE NUMBER								
	container or label with you when calling a poison control center or doctor or going for ay also contact PROSAR at 1-877-250-9291 for emergency medical treatment								

In case of spills, fire, leaks or accidents call 1-800-535-5053.

# Optional Text for Label Booklet: [For additional precautionary, handling, and use statements, see inside of this booklet.]

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves such as butyl rubber ≥14 mils, or natural rubber ≥14 mils, or neoprene rubber ≥14 mils, or nitrile rubber ≥14 mils
- Shoes plus socks

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

#### USER SAFETY RECOMMENDATIONS

Users should:

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

## ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas or rinsate below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

#### **Groundwater Advisory and Proper Handling Instructions**

This chemical has properties and characteristics associated with chemicals detected in groundwater. This use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes or reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum, 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the

mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

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

This product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide spray mixture.

## PHYSICAL AND CHEMICAL HAZARDS

Do not use with or store near oxidizing agents.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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), notification to workers, 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 4 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

Coveralls

• Chemical resistant gloves such as butyl rubber  $\geq 14$  mils, or natural rubber  $\geq 14$  mils, or neoprene rubber

- >14 mils, or nitrile rubber >14 mils
- Shoes plus socks

#### **PRODUCT INFORMATION**

Do not use or sale this product in Long Island, New York State.

Label directions must be with the applicator when treatment takes place, and must be read and followed in full. Application of IMAZETHAPYR 240 SL in any way that is not in accordance with these directions may cause crop injury.

Treatment with IMAZETHAPYR 240 SL will provide residual control of listed germinating target species when there is sufficient moisture.

#### **Crop Growth Following Treatment**

Normal growth of rotational crops should take place following applications of IMAZETHAPYR 240 SL. However, it is impossible to anticipate and eliminate all risk factors brought about by varying environmental and agronomic conditions. Rotational crop injury therefore may result from treatment with IMAZETHAPYR 240 SL.

A combination of treatment with this product and certain conditions, such as high organic matter in the soil, low soil pH, heavy soil texture or low rainfall, may cause damage to crops that are subsequently planted.

#### Mode of Action

Treatment with IMAZETHAPYR 240 SL provides control through the AHAS/ALS enzyme inhibiting mode of action. Application of IMAZETHAPYR 240 SL works by uptake of the treatment by target species through foliage and/or roots and then translocates quickly to the growing points. For optimal mode of action, soil must be moist prior to application.

Applications of IMAZETHAPYR 240 SL may cause internode shortening and/or yellowing of desirable vegetation. These effects, when they occur, are temporary and normal growth should resume 1-2 weeks following treatment. Sugar beets and other vegetable crops are susceptible to residues of IMAZETHAPYR 240 SL in the soil.

#### **RESISTANCE MANAGEMENT**

IMAZETHAPYR 240 SL is a Group 2 Herbicide (contains the active ingredient Imazethapyr). Following many years of continuous use of this product and chemically related products biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Any weed population may contain or develop plants naturally resistant to IMAZETHAPYR 240 SL and other Group 2 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. Resistance may be suspected if the following three conditions are noted: 1. A patch of weeds were not controlled by the application of the proper rate of the herbicide to properly-sized weeds under the proper growing conditions. 2. Some treated weeds (of the same size and species) are controlled while other adjacent weeds are not controlled. 3. A patch of weeds that are ordinarily controlled seems to escape treatment for multiple years and the patch seems to grow.

Fields should be scouted prior to application to identify the weed species present and their growth state to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective. Where this is known or suspected and weeds controlled by this product are expected to be present along with resistant biotypes we recommend the use of this product in combinations or in sequence with other registered herbicides which are not solely a Group 2 Herbicide. If only resistant biotypes are expected to be present use a registered herbicide which is not solely a Group 2 Herbicide Consult with your state Agricultural Extension Service for specific recommendations.

Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include:

- (I) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- (2) a spreading patch of non-controlled plants of a particular weed species;
- (3) surviving plants mixed with controlled individuals of the same species.

If resistance is known or suspected, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not solely a Group 2 Herbicide. If resistant biotypes are expected to be present in dense infestations, use a registered herbicide which is not solely a Group 2 Herbicide and consult with your state Agricultural Extension Service for specific recommendations. Hand rouging of escaped red rice and weedy rice is recommended.

Report any incidence of non-performance of this product against a particular weed species to your ADAMA retailer, representative, or call 1-866-406-6262. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

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.

#### Weed Resistance

Some listed weeds have developed naturally occurring biotypes which will not be controlled by applications of IMAZETHAPYR 240 SL or other products that have a similar mode of action, such as sulfonylureas, sulfonamides and pyrimidyl benzoates.

Where naturally resistant biotypes occur, control can be achieved by sequentially applying or tank mixing this product with a registered product with a different mode of action.

#### Replanting

When replanting an area previously treated with IMAZETHAPYR 240 SL, the following crops may be planted:

peanuts	lima beans
southern peas	soybeans

#### Restrictions

- Do not rework the soil any deeper than the treated zone.
- Do not apply this product a second time.

Refer to individual crop sections and the Rotational Crop section for minimum replanting intervals following treatment.

#### **USE DIRECTIONS**

Containers containing IMAZETHAPYR 240 SL must be closed securely in order to prevent contamination and spills.

Application equipment must be drained and cleaned thoroughly prior to mixing the application solution and treatment. Application equipment must also be drained and thoroughly cleaned following treatment to avoid contamination and future crop injury.

#### Adjuvants

When applying IMAZETHAPYR 240 SL as a postemergence treatment, it must be combined with a fertilizer solution (see Fertilizer Solution table below) and **one** of the following adjuvants:

Adjuvant	Directions						
Crop Oil Concentrate <sup>1</sup> (vegetable or petroleum based)	When target species are under stress from temperature or moisture, use methylated seed oil at the rate of 1.0% v/v (i.e. 1 gallon of methylated seed oil per 100 gallons of spray application solution)						
	Use crop oil concentrate at a rate of 1.25% v/v (i.e. 1.25 gallons of crop oil concentrate per 100 gallons of spray application solution)						
Surfactant	Combine IMAZETHAPYR 240 SL with a non-ionic surfactant with a minimum of 80% active ingredient, at the rate of 0.25% v/v (i.e. 0.25 gallons (1 quart) of surfactant per 100 gallons of spray application solution). A dry surfactant or organo-silicone surfactant may be combined with IMAZETHAPYR 240 SL instead of a non-ionic surfactant.						
<sup>1</sup> Do not apply IMAZE	THAPYR 240 SL with a crop oil concentrate when treating edible legume						
vegetables.							

#### Fertilizer Solution<sup>1,2</sup>

Combine IMAZETHAPYR 240 SL with a nitrogen based liquid fertilizer (for example: 28%N, 32%N, 10-34-0).

Add 1.25-2.5 gallons of fertilizer solution per 100 gallons of application spray solution. When target species are under stress from temperature and/or moisture, use the higher rate of fertilizer in the specified rate range.

As an alternative to a fertilizer solution, a spray grade ammonium sulfate may be combined with IMAZETHAPYR 240 SL at a rate of 12-15 pounds per 100 gallons of spray application solution

<sup>1</sup>Do not use fertilizer solution in California

<sup>2</sup>Fertilizer solution is not required for applications south of Interstate Highway 40, except in New Mexico, Oklahoma and Texas.

#### Restrictions

- Do not apply IMAZETHAPYR 240 SL with a crop oil concentrate when treating edible legume vegetables.
- Do not use fertilizer solution in California.

#### Mixing Procedure

- 1. Fill mix tank half full with clean water.
- 2. Add the specified amount of IMAZETHAPYR 240 SL while agitating the solution.
- 3. Add specified adjuvants while continuing agitation.
- 4. Fill the remaining volume with clean water.

#### Tank Mixtures

IMAZETHAPYR 240 SL may be tank mixed with registered organo-phosphate or carbamate insecticide products. When applied in crops, temporary crop damage may result. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply. 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 directionary statements of each product in the tank mixture.

#### Tank Mix Procedure

- 1. Fill tank with clean water.
- 2. Combine soluble packet products whilst agitating and thoroughly mix.
- 3. Add ingredients not in soluble packets:
  - Dispersible granules (DG)
  - Dry flowables (DF)
  - Wettable powders (WP)
  - Liquid flowables

Continue agitation and mix thoroughly.

- 4. Add IMAZETHAPYR 240 SL and other aqueous solution product(s). Continue agitation and mix thoroughly.
- 5. Add emulsifiable concentrate (EC) products. Continue agitation and mix thoroughly.
- 6. Add crop oil or surfactant as appropriate (see Adjuvants section above). Continue agitation and mix thoroughly.
- 7. Add fertilizer solution as appropriate (see Adjuvants section above). Continue agitation and mix thoroughly.
- 8. Fill the remaining tank volume with clean water. Continue agitation and mix thoroughly.

## SPRAY APPLICATIONS

Restriction

 Do not apply IMAZETHAPYR 240 SL when wind speed exceeds 10 mph or when spray may drift to sensitive crops (e.g. sugar beets and leafy vegetables).

#### Ground Applications

Apply IMAZETHAPYR 240 SL in a minimum of 10 gallons of water per acre. Apply solution at 20-40 psi, at a sufficient boom height to ensure uniform coverage of target species foliage.

When applying IMAZETHAPYR 240 SL to no-till crop areas, use a minimum of 20 gallons of water per acre for sufficient coverage of target species. Apply IMAZETHAPYR 240 SL in higher volume where there is dense crop residue and/or target species foliage.

#### Restrictions

- For postemergence applications, only use flat fan nozzles.
- Do not overlap spray applications.

#### Low Volume Spray Application

Use low volume spray application equipment to apply IMAZETHAPYR 240 SL to soybeans. Treat target species before they reached the specified height. For an effective treatment, calibrate application equipment to ensure spray coverage is sufficient and uniform.

Apply IMAZETHAPYR 240 SL in a minimum of 10 gallons of water per acre at a pressure of 40-60 psi.

#### Aerial Application

Unless otherwise directed, IMAZETHAPYR 240 SL may be applied by air in a minimum of 5 gallons of water per acre.

For optimal effectiveness when applying IMAZETHAPYR 240 SL as a postemergence treatment, add a fertilizer solution and a non-ionic surfactant or crop oil concentrate to the application solution.

Non Ionic Surfactant	Combine 1 quart per 100 gallons of application solution.
Crop Oil Concentrate	Combine 1.25 gallons per 100 gallons of application solution.
Liquid Fetilizer <sup>1</sup>	Combine 1.25 gallons per 100 gallons of application solution

#### <sup>1</sup>Do not use fertilizer solution in California

Follow drift management directions in order to avoid contact with and damage to crops. Note: drift management directions do not apply to dry formulation applications, public health uses or forestry treatments.

#### Restrictions

- Avoid contact with non-target species through drift or otherwise. Applicators are responsible for assessing application conditions and equipment in order to avoid drift.
- On the boom, the distance of the outer most nozzles must not exceed 75% the length of the wingspan or rotor.
- Spray nozzles must always be parallel with the air stream and must point backwards.
- Spray nozzles must not be pointed downwards more than 45 degrees.

More restrictive directions imposed by states must be followed.

#### Aerial Drift Reduction Advisory:

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

#### Controlling Droplet Size

• Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Increase water volume to at least 10 gallons of water per acre if grass foliage or crop canopy is dense.

• Pressure - Do not exceed the nozzle manufacturer's specific pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

• Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.

• Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the specified practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

• Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### Boom Length

For some use patterns, reducing the effective boom length to less than 75% of the wingspan or rotor length may further reduce drift without reducing swath width.

#### **Application Height**

Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

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

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

#### Temperature and Humidity

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

#### **Temperature Inversions**

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

#### Sensitive Areas

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

In addition, the applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

## **APPLICATION INSTRUCTIONS**

#### **POSTEMERGENCE APPLICATIONS**

When applied as a postemergence treatment, IMAZETHAPYR 240 SL will provide control of existing grasses and broadleaf weeds in conventional production systems as well as conservation tillage areas. Target species absorb the treatment through foliage and roots and will either die or stop growing. IMAZETHAPYR 240 SL will also provide control of target species that emerge following application.

Temperatures under 50°F will reduce the efficacy of an application of IMAZETHAPYR 240 SL. For optimal effectiveness and to minimize the risk of crop damage, delay application for 48 hours after the temperature has reached 50°F for a minimum of 10 hours.

Apply this product during early postemergence when target species are less than 3 inches in height and actively growing, and a minimum of one hour prior to irrigation/rainfall. Treat target species when most of them have reached the specified growth stage.

For optimal effectiveness, combine IMAZETHAPYR 240 SL with a crop oil concentrate or a surfactant and a nitrogen-based fertilizer. Refer to the Adjuvants section above.

For optimal control of target species, carry out tillage 7-10 after application. Tillage will improve residual control of target species, in particular when conditions are dry.

#### DOUBLE CROP SOYBEANS NO TILLAGE/MINIMUM TILLAGE SYSTEMS

Applied during early postemergence, treatment with IMAZETHAPYR 240 SL will control existing weeds and provide residual control of most weed species in the following crops:

- Soybeans in no tillage/minimum tillage systems
- Soybeans in double crop production systems

Apply IMAZETHAPYR 240 SL before or after crop emergence in accordance with the specified weed height at the time of application.

Where weeds are greater than the specified size and IMAZETHAPYR 240 SL is applied before crop emergence, combine the application solution with a contact herbicide in order to improve control (refer to the Preemergence Applications section).

#### SOIL APPLICATIONS

Target species absorb the treatment through foliage and roots and will either die or stop growing. IMAZETHAPYR 240 SL will also provide control of target species that emerge following application.

Apply IMAZETHAPYR 240 SL in conservation tillage areas designed to meet conservation compliance requirements in order to achieve control of listed species.

IMAZETHAPYR 240 SL can be applied in soybeans as a preplant incorporated, early preplant, or preemergence treatment. IMAZETHAPYR 240 SL may also be used to treat no-tillage, minimum tillage and conventional systems.

For optimal effectiveness, rainfall/irrigation is required to ensure that there is soil moisture (to a depth of 2 inches) so that treatment with IMAZETHAPYR 240 SL can move into the weed germination zone. The required level of rainfall irrigation will depend on existing soil moisture, organic content and soil texture.

If the moisture level remains insufficient 7 days after treatment, carry out cultivation in order to control emerging weeds. As the moisture content returns to adequate levels, IMAZETHAPYR 240 SL will provide residual control of listed germinating species. The location of the root system in the soil and species type will determine the effectiveness of application on established weeds.

#### Soil Applications with Liquid Fertilizers

IMAZETHAPYR 240 SL can be applied in liquid fertilizers to soybeans on its own or in combination with dimethenamid and pendimethalin. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

Carry out a jar mixture compatibility test on the proposed mixture/combination before mixing on a larger scale prior to application.

Apply treatment solution with ground equipment in a minimum of 20 gallons of liquid fertilizer per acre.

#### Restriction

• Any tank mixture containing trifluralin must only be applied to soybeans.

#### PREEMERGENCE (SURFACE APPLICATIONS)

Apply IMAZETHAPYR 240 SL in production tillage systems up to 45 days before planting and at planting in no tillage, reduced tillage or in conventional systems. IMAZETHAPYR 240 SL may also be applied as an after planting and preemergence treatment.

#### Reduced or No-Till Tillage Systems

Treat with IMAZETHAPYR 240 SL prior to planting, during planting or after planting in a minimum of 20 gallons of water per acre. For optimal effectiveness, ensure coverage is thorough and uniform. Use a higher volume solution where weeds are dense or where there is dense crop residue.

For enhanced control of grasses, tank mix IMAZETHAPYR 240 SL with registered products containing pendimethalin or dimethenamid.

For optimal treatment of existing target species, tank mix IMAZETHAPYR 240 SL with registered products containing paraquat, glyphosate, or 2,4-D (for application as an early pre-planting treatment - refer to 2,4-D label for restrictions). Product(s) can be tank mixed with IMAZETHAPYR 240 SL alone or in combination with with registered products containing pendiamethalin or dimethenamid.

#### Restriction

• Do not tank mix IMAZETHAPYR 240 SL with registered products containing 2,4-D if there are no existing target species at the time of treatment.

#### **INCORPORATED APPLICATIONS – PREPLANT TREATMENT**

Apply IMAZETHAPYR 240 SL incorporated to a depth of 1-2 inches after land preparation and bed formation with a rolling cultivator (if crops planted on beds) or PTO-driven equipment or a rolling cultivator.

Keep IMAZETHAPYR 240 SL at a depth of 1 to 2 inches in the finished beds.

When applying IMAZETHAPYR 240 SL for control of nutsedge in peanuts, incorporate the product into the soil with two passes of the incorporation equipment. In order to minimize the risk of streaking, make the second pass at an offset angle to the first pass.

#### Restriction

• When treating soybeans, treatment must be applied a minimum of 45 days before planting.

#### FEDERAL CONSERVATION RESERVE PROGRAM AND AGRICULTURAL RESERVE PROGRAM LAND SEEDED TO FORAGE LEGUME SPECIES

Apply IMAZETHAPYR 240 SL to control many annual grass and broadleaf weeds in Agricultural Reserve Programs (Set-Aside) and Conservation Reserve Programs, as well as areas seeded to forage legumes.

Treatment with IMAZETHAPYR 240 SL may cause a reduction in growth of legumes, however these effects are temporary, and desirable crops will benefit from reduced competition from weed species.

#### Restrictions

- Do not allow grazing/feeding of treated legumes.
- Treated legumes must not be cut for use as forage/hay.
- Treated legumes must not be harvested for use as feed.
- Seed from treated legumes must not be used for sprouting.
- Do not exceed a maximum of 1 application of IMAZETHAPYR 240 SL per year (0.063 lbs of imazethapyr acid equivalent per acre per year)

#### **Cover Crops**

Apply IMAZETHAPYR 240 SL to cover crops, including:

Legumes						
Alfalfa	Lupin					
Birdsfoot trefoil	Milk vetch					
Clover	Sainfoin					
Crown vetch	Trefoil					
Kudzu	Velvet bean					
Lespedeza	Vetch					

#### Restriction

• Where cover crops have been planted into areas previously treated with IMAZETHAPYR 240 SL for control of target species in soybeans, do not treat the cover crop until the following spring.

#### Conservation Reserve Program: Postemergence Applications

Apply IMAZETHAPYR 240 SL to cover crops in Conservation Reserve Program areas at a rate of 4 fluid ounces per acre as a postemergence treatment to established legumes. Apply as a fall treatment or in the spring before they reach the specified height for control.

Legume seedlings that have 3 fully expanded trifoliate leaves (minimum) may also be treated with IMAZETHAPYR 240 SL.

See the Weeds Controlled table in the Soybean section for information.

## **CROP USE DIRECTIONS**

## ALFALFA AND CLOVER

Application of IMAZETHAPYR 240 SL will control a broad range of grass and broadleaf weeds in alfalfa and clover. Clover and alfalfa develop tolerance to applications of this product once it is at/beyond the 3 trifoliate growth stage. Yellowing or minor height reduction may occur following treatment, particularly where application is made at temperatures of 40°F or less.

Apply IMAZETHAPYR 240 SL as a broadcast postemergence application to actively growing weeds in alfalfa and clover at the rate of 3-6 fluid ounces per acre. Apply before target species exceed 3 inches in height.

Target species suffering from stress (e.g., due to drought or extremes of temperature) are less susceptible to treatment.

#### Restrictions

- For application in alfalfa and clover as a postemergence application only.
- Do not exceed a maximum of 6 fluid ounces of IMAZETHAPYR 240 SL per acre per year (0.094 lbs. of imazethapyr acid equivalent per acre per year).
- Do not exceed a maximum of 4 fluid ounces of IMAZETHAPYR 240 SL per acre (0.063 lbs of imazethapyr acid equivalent per acre per year) in North Dakota or Minnesota north of Highway 210.
- Do not exceed a maximum of 4 fluid ounces of IMAZETHAPYR 240 SL per acre in the last year of the stand.

- Treated alfalfa or clover must not be grazed, fed or harvested for a minimum of 30 days following application.
- Do not exceed a maximum of 1 application of IMAZETHAPYR 240 SL per year. (0.063 lbs of imazethapyr acid equivalent per acre per year).

#### Seedlings

Treatment with IMAZETHAPYR 240 SL may cause a reduction in growth. This effect is temporary.

Apply IMAZETHAPYR 240 SL to seedling alfalfa and clover as a post emergence application when most weeds are 1-3 inches in height and seedlings are at or beyond the second trifoliate stage

When treating mustards or other low growing target species, treat with IMAZETHAPYR 240 SL before the rosette is greater than 3 inches.

#### Restrictions

- For application in alfalfa and clover as a postemergence application only.
- Apply IMAZETHAPYR 240 SL to alfalfa or clover grown for seed before bud formation.

#### **Established Alfalfa/Clover**

Apply IMAZETHAPYR 240 SL in established dormant or semi-dormant clover or alfalfa before any significant growth/regrowth (i.e. less than 3 inches regrowth). Applications delayed until after significant regrowth has taken place may not allow treatment to reach target species. Make applications in the spring or in the fall, or treat between cuttings.

#### **Replanting Restriction**

• Do not plant clover or alfalfa for a minimum of 4 months following treatment with IMAZETHAPYR 240 SL.

See the Rotational Crop section for more information.

#### Weeds Controlled (Postemergence Application)

For optimal suppression/control, apply IMAZETHAPYR 240 SL before target species reach the specified height below.

#### Weeds Controlled: Broadleaf Weeds

Weed	App. Rate (fl. oz./acre)	Max. Size (inches)	Weed	App. Rate (fl. oz./acre)	Max. Size (inches)	Weed	App. Rate (fl. oz./acre)	Max. Size (inches)	Weed	App. Rate (fl. oz./acre)	Max. Size (inches)
	3	*		3	4 in.	<b>D</b> 1 4	3			3	
Artichoke, Jerusalem	4	6 in.	Beets, Wild	4	5 in.	Bedstraw, Catchweed	4	3 in.	Buckwheat, Wild	4	3 in.
Jeiusaleili	6	8 in.	1	6	6 in.	Catchweed	6	4 in.	vviid	6	4 in.
Objelance el	3	*	Objelevened	3	*	O a alula hum	3	*		3	
Chickweed, Common	4	3 in.	Chickweed,	4	3 in.	Cocklebur,	4	8 in.	Cress, Hoary	4	*
Common	6	4 in.	mouseear	6	3 in.	common	6	8 in.	-	6	*
	3		Dock,	3		Deals Ourly	3	1		3	
Dandelion	4	*	Broadleaf	4		Dock, Curly	4		Dodder+	4	
	6	5*	(seedling)	6	6*	(seedling)	6	6 6*	6	*	
	3		Filaree, Redstem	3		Filaree, Whitestem	3	1	Fleabane, Rough	3	
Fiddleneck	4			4	*		4	*		4	3 in.
	6	4*		6	3 in.		6	3 in.		6	3 in.
	3	*	Orecefeet	3	*	Onesingle	3			3	
Fixweed	4	3 in.	Goosefoot, Nettleleaf	4	3 in.	Groundsel, Common	4		Henbit	4	*
	6	4 in.	Nellieleai	6	4 in.	Common	6	3*		6	3 in.
	3		Ka atau a d	3		Kochia, (non-	3	*	Laurelea averatea	3	
Jimsonweed	4	3 in.	Knotweed, Prostrate	4	*	ALS	4	3 in.	Lambsquarter, (common)†	4	*
	6	4 in.	FIOSITALE	6	4 in.	resistant)	6	3 in.	(common)]	6	2*
1 - 44	3		Mallau	3			3		Manaianalami	3	
Lettuce, Minors	4	3 in.	Mallow,	4	3 in.	Marshelder	4	4 in.	Morningglory, Entireleaf	4	*
wintors	6	4 in.	Common	6	3 in.	1	6	6 in.	Enurelear	6	3 in.
Marningglan	3		Marningglam	3		Marningglan	3	*	Marningglan	3	
Morningglory, Ivyleaf	4	*	Morningglory, Pitted	4	*	Morningglory, Smallflower	4	3 in.	Morningglory, Tall	4	*
ivyieai	6	3 in.	Filled	6	3 in.	Smaillower	6	4 in.	rali	6	3 in.

Mustard.	3	3 in.	Mustard	3	3 in.	Mustard	3	3 in.	Nettle.	3	
Tumble	4	3 in.	Mustard, Wild	4	3 in.	Mustard, Black	4	3 in.	Burning	4	3 in.
I umble	6	4 in.	VVIId	6	4 in.	DIACK	6	4 in.	Burning	6	4 in.
Nightshade,	3	3 in.	Nightshade,	3	3 in.	Nightabada	3	3 in.	Outongula	3	
Black	4	3 in.	Eastern	4	3 in.	Nightshade, Hairy	4	3 in.	Oxtongue, Bristly	4	
DIACK	6	4 in.	Black	6	4 in.	пану	6	4 in.	Diisuy	6	3*
Dennuereee	3	3 in.	Dennenwood	3	3 in.	Depression	3	*	Dimused	3	4 in.
Pennycress, Filed	4	3 in.	Pepperweed, Field	4	3 in.	Pepperweed, Virginia	4	3 in.	Pigweed, redroot	4	6 in.
Filed	6	4 in.	Field	6	4 in.	virginia	6	3 in.	rearoot	6	8 in.
Dimused	3	4 in.	Digwood	3			3		Degwood	3	
Pigweed, Smooth	4	6 in.	Pigweed,	4	6 in.	Radish, Wild	4	*	Ragweed, Common	4	2 in.
Smooth	6	8 in.	Spiny	6	8 in.		6	4 in.	Common	6	3 in.
Demused	3			3		Dealert	3	3 in.		3	*
Ragweed, Giant	4	3 in.	Redmaids	4	3 in.	Rocket, London	4	4 in.	Rocket, Yellow	4	3 in.
Giant	6	3 in.		6	4 in.		6	6 in.		6	4 in.
Dealerstere	3	1		3	3 in.	Smartweed, Ladysthumb	3	*	Smartweed, Pennsylvania	3	*
Rockpurslane, Desert	4		Shepherds-	4	3 in.		4	3 in.		4	3 in.
Desen	6	3 in.	purse	6	4 in.		6	4 in.		6	4 in.
Smartweed,	3	1	0	3		0	3			3	
Swamp	4	3 in.	Sprurge, Prostrate	4	*	Spurge,	4	*	Spurge, Petty	4	3 in.
(seedling)	6	4 in.	Prostrate	6	3 in.	Spotted	6	3 in.		6	4 in.
	3	Ì	0 1	3	*		3		<b>T</b> ( )	3	3 in.
Spurry, Corn	4	3 in.	Sunflower,	4	4 in.	Swinecress	4	3 in.	Tansymustard, Green	4	3 in.
	6	3 in.	Common	6	6 in.		6	3 in.	Green	6	4 in.
- · ·	3	3 in.	<b>T</b> I : 0	3	*		3	*	14/ 1	3	
Tansymustard,	4	3 in.	Thistle,	4	3 in.	Velvetleaf	4	3 in.	Watercress,	4	2 in.
Pinnate	6	4 in.	Russian	6	3 in.		6	4 in.	Creeping	6	3 in.
	3			3					İ İ		
Watercress	4	3 in.	Willowweed,	4	3 in.	1					
	6	3 in.	Panicle	6	3 in.						

+ For optimal effectiveness, combine Imazethapyr with a methylated seed oil or crop oil concentrate following dodder emergence but before/immediately after attachment. IMAZETHAPYR 240 SL will provide control of many grass weed species. For optimal effectiveness under heavy pressure from grass weeds, apply IMAZETHAPYR 240 SL sequentially with a grass herbicide (e.g. sethoxydim) † Apply at the 1-2 leaf stage of growth.

∞IMAZETHAPYR 240 SL will provide control of emerged woolly cupgrass only.

Ω Apply IMAZETHAPYR 240 SL to guackgrass that is growing actively and less than 7 inches in height for suppression only.

Weed**	App. Rate (fl. oz./acre)	Max. Size (inches)	Weed**	App. Rate (fl. oz./acre)	Max. Size (inches)	Weed**	App. Rate (fl. oz./acre)	Max. Size (inches)	Weed**	App. Rate (fl. oz./acre)	Max. Size (inches)
Barnyard-	4	*	Bluegrass,	4		Canary-	4	*	Cereal,	4	*
grass	6	3 in.	Annual	6	3*	grass, Littleseed	6	3*	volunteer barley	6	4*
Cereal,	4	*	Cereal,	4	*	Crabgrass,	4	*	Crabgrass,	4	*
volunteer oats	volunteer oats 6 4*	volunteer wheat	6	4*	Large	6	3 in.	Smooth	6	3 in.	
Cupgrass,	4	3 in.	Foxtail, Giant	4	6 in.	Foxtail,	4	3 in.	Foxtail, Yellow	4	3 in.
Woolly∞	6	3 in.		6	6 in.	Green	6	4 in.		6	3 in.
Johnson-	4	8 in.	Johnson-	4	*	Millet, Wild	4	*	Nutsedge, Yellow	4	*
grass, Seedling	6	8 in.	grass, Rhizome	6	6-12*	Proso	6	3 in.		6	6*
Nutsedge,	4	*	Oats, Wild	4	*	Rice, Red	4	3 in.	Shattercane	4	8 in.
Purple	6	6*	Oals, Wild	6	4*	Rice, Reu	6	4 in.		6	10 in.
Signal-	4	*	Quackgroad	4							
grass, broadleaf	6	8 in.	QuackgrassΩ	6	7*						

#### Weeds Controlled: Grass Weeds and Sedges

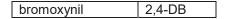
\* Suppression only

\*\*IMAZETHAPYR 240 SL will provide control of many grass weed species. For optimal effectiveness under heavy pressure from grass weeds, apply IMAZETHAPYR 240 SL sequentially with a grass herbicide (e.g. sethoxydim)

#### Tank Mixtures

IMAZETHAPYR 240 SL may be tank mixed with other registered products where control is required of target species not listed in this table. 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.

IMAZETHAPYR 240 SL may be tank mixed with registered products containing the the following active ingredients:



#### Establishing Stands

Apply IMAZETHAPYR 240 SL before target species reach the specified height in the Weeds Controlled table and after clover or alfalfa has 2 fully expanded trifoliate leaves. Treat spring, summer or fall seeded clover or alfalfa.

Clover or alfalfa may be inter-seeded with oats. This method will reduce soil erosion and assist in stand establishment. Treating clover or alfalfa inter-seeded with oats will greatly reduce the growth of oats, or will kill the oats, allowing clover/alfalfa to establish with reduced soil erosion. Treat oat inter-seeded clover/alfalfa with IMAZETHAPYR 240 SL when the oats are at the 3-4 leaf stage of growth.

#### Established Alfalfa/Clover (Growing)

Apply IMAZETHAPYR 240 SL to clover/alfalfa after cutting for control of listed weeds during the season. Following cutting, remove hay from the treatment area and treat excessive clover/alfalfa regrowth with this product.

Treatment with IMAZETHAPYR 240 SL will also reduce competition from present perennial grasses including bromes, fescues, orchardgrass, and timothy grass.

#### Established Alfalfa/Clover (Dormant)

Apply this product to dormant alfalfa or clover in the fall following the last cutting. Also apply this product in the spring to dormant alfalfa or clover, or as alfalfa or clover breaks dormancy. Apply spring treatments prior to excessive alfalfa or clover growth (less than 3 inches), to reduce spray interference.

#### Restriction

• Treated clover or alfalfa must not be grazed, fed or harvested for a minimum of 30 days following treatment with IMAZETHAPYR 240 SL.

## NAVY, GREAT NORTHERN, RED KIDNEY, BLACK TURTLE, CRANBERRY, PINTO, LIMA, AND SMALL WHITE TYPE DRY BEANS, LENTILS, WHITE LUPINS, CHICKPEAS (GARBANZO BEANS), DRY EDIBLE PEAS, ENGLISH AND SOUTHERN PEAS

Directions for use in the above crops in states east of and including: North Dakota, South Dakota, Wyoming, Colorado, and New Mexico (except the states east of and including: Vermont, Massachusetts, and Connecticut).

Refer to the map below for geographical use area.



Crops must be a minimum of 3 inches in height or have a minimum of one trifoliate leaf prior to a postemergence application of IMAZETHAPYR 240 SL. If crops are treated prior to this stage, delayed maturity and/or reduced crop growth will result.

The following species are more sensitive to treatment with IMAZETHAPYR 240 SL:

- Olathe
- Pinto variety UI-111

#### Restrictions

- IMAZETHAPYR 240 SL must not be applied through an irrigation system of any type.
- Do not apply IMAZETHAPYR 240 SL to Domino variety black turtle beans.
- IMAZETHAPYR 240 SL must not be applied as a postemergence treatment to:
  - Chickpeas
  - Lentils
  - Lima beans
  - White lupins
- Do not exceed a maximum of one application of IMAZETHAPYR 240 SL per year.
- Do not exceed a maximum application rate to peas and beans (except Southern peas) in this area of 3 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.047 pound of imazethapyr acid equivalent per acre per year).
- Do not exceed a maximum application rate to Southern peas of 4 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.063 pound of imazethapyr acid equivalent per acre per year).
- For postemergence application of IMAZETHAPYR 240 SL, do not combine this product with petroleum oils, crop oils or methylated seed oils.
- Only nonionic surfactant can be used with IMAZETHAPYR 240 SL as a spray additive.
- There must be a minimum of 30 days between treatment with IMAZETHAPYR 240 SL and harvest of:
  - English peas
  - Southern peas
  - Succulent lima beans
- There must be a minimum of 60 days between treatment with IMAZETHAPYR 240 SL and harvest of:
  - Chick peas
  - Dry edible peas
  - Lentils
  - Any other listed bean or pea types

#### NAVY, GREAT NORTHERN, RED KIDNEY, BLACK TURTLE, CRANBERRY, PINTO AND SMALL WHITE DRY BEANS, DRY EDIBLE PEAS, ENGLISH AND SOUTHERN PEAS Preemergence

Apply IMAZETHAPYR 240 SL as a preemergence treatment at a rate up to 3 fluid ounces per acre to the following:

- Dry beans
- Dry edible peas
- English peas

Apply IMAZETHAPYR 240 SL as a preemergence treatment in the period from immediately after planting to 3 days after planting, at a rate up to 4 fluid ounces per acre to southern peas.

IMAZETHAPYR 240 SL may be applied in a tank mixture with a registered grass herbicide. IMAZETHAPYR 240 SL can also be applied as a preemergence application after a registered grass herbicide has been applied as a preplant incorporated treatment.

Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

#### Preplant Incorporated

Apply IMAZETHAPYR 240 SL as a preplant incorporated treatment at a rate up to 3 fluid ounces per acre to the following:

- Dry beans: navy, great northern, red kidney, black turtle, cranberry, pinto and small white type dry beans
- Dry edible peas
- English peas

Apply IMAZETHAPYR 240 SL as a preplant incorporated treatment within a week of planting, at a rate up to 4 fluid ounces per acre to southern peas.

IMAZETHAPYR 240 SL may be tank mixed with a registered grass herbicide when used as a preplant incorporated treatment.

Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

#### Early Postemergence Applications

The IMAZETHAPYR 240 SL application solution must be a combined with a nonionic surfactant that contains a minimum of 80% active ingredient at the rate of 2 pints per 100 gallons of spray solution.

Apply IMAZETHAPYR 240 SL as an early postemergence treatment at a rate - up to 3 fluid ounces per acre to the following:

- Dry beans that are at the one fully expanded trifoliate leaf growth stage or beyond.
- Dry edible peas that are a minimum of 3 inches in height, but prior to flowering and prior to 5 nodes.
- English peas that are a minimum of 3 inches in height, but prior to flowering and prior to 5 nodes.

Apply IMAZETHAPYR 240 SL as an early postemergence treatment at a rate up to 4 fluid ounces per acre to southern peas that are a minimum of 3 inches in height, but prior to flowering and prior to 5 nodes.

For control of weed species not listed in these directions, IMAZETHAPYR 240 SL may be tank mixed with registered products containing bentazon. When IMAZETHAPYR 240 SL is mixed with registered products containing bentazon, antagonism causes a reduction in the control of grasses. A nitrogen-based fertilizer may be added to the application solution, but only in tank mixtures containing bentazon

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

#### Restrictions

- Application of trifluralin before treatment with IMAZETHAPYR 240 SL will make crop injury likely more severe.
- In Michigan and the DelMarVa peninsula (Delaware, Maryland, and Virginia), do not exceed a maximum of 2 fluid ounces of IMAZETHAPYR 240 SL per acre when applying to sands or loamy sand soils.
- North of Highway 210 in Minnesota or in North Dakota: do not exceed a maximum of 2 fluid ounces per acre of IMAZETHAPYR 240 SL.

## LIMA BEANS, CHICKPEAS (GARBANZOS), LENTILS AND WHITE LUPINS

#### Restrictions

- Do not apply IMAZETHAPYR 240 SL to white lupins that are grown in sand or loamy sand soils.
- In Michigan and the DelMarVa peninsula (Delaware, Maryland, and Virginia), do not exceed a maximum of 2 fluid ounces of IMAZETHAPYR 240 SL per acre when applying to sands or loamy sand soils.
- North of Highway 210 in Minnesota or in North Dakota: do not exceed a maximum of 2 fluid ounces per acre of IMAZETHAPYR 240 SL.
- Do not exceed a maximum of 1 application of IMAZETHAPYR 240 SL per year. (0.063 lbs of imazethapyr acid equivalent per acre per year).

#### **Preemergence Application**

Apply IMAZETHAPYR 240 SL as a preemergence application in the period between: immediately following planting to 3 days following planting, at a broadcast rate up to 3 fluid ounces per acre.

IMAZETHAPYR 240 SL may be tank mixed with a registered grass herbicide or apply IMAZETHAPYR 240 SL after a preplant incorporated treatment with a registered grass herbicide.

#### Preplant Incorporated Application

Apply IMAZETHAPYR 240 SL within a week before planting as a preplant incorporated treatment at a broadcast rate of up to 3 fluid ounces per acre.

IMAZETHAPYR 240 SL may be tank mixed with a registered grass herbicide when used as a preplant incorporated treatment.

Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

#### Weeds Controlled

Weeds	Application Rate*						
Mustard, wild							
Nightshade, black (suppression only)	Broadcast rate of 2 fluid ounces per acre						
Nightshade, Eastern black (suppression only)	_						
Mustard, wild							
Nightshade, black	Broadcast rate of 3 fluid ounces per acre**						
Nightshade, Eastern black							
Nightshade, hairy							
Pigweed, redroot							
* When applied as an early postemergence, incorporated preplant or preemergence treatment. **Apply postemergence treatments when weeds are less than 2 inches in height.							

The following tables list weeds controlled or suppressed when IMAZETHAPYR 240 SL is applied at a broadcast rate of 4 fluid ounces per acre in southern peas only as a postemergence application. In some cases, IMAZETHAPYR 240 SL may be applied as a soil application (see table footnotes). In assessing the growth stage of weed species (leaf stage), do not count cotyledon leaves.

#### Broadleaf Weeds Controlled

Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)
Anoda, Spurred†	4	1 to 3	Srtichoke, Jerusalem	8	6 to 10	Buffalobur†Ω			Carpetweed†		
Cocklebur, Common†Ω	8	1 to 8	Galinsoga†			Jimsonweed†‡	4	1 to 3	Kochia (non- ALS resistant)†	4	1 to 3
Lambsqusrters†‡	*	1 to 2	Mallow, Veince <sup>∞</sup>			Marshelder†	4	1 to 3	Morningglory, entireleaf∞	2	1 to 2
Morningglory, ivyleaf <sup>∞</sup>	2	1 to 2	Morningglory, pitted∞	2	1 to 2	Morningglory, smallflower†	4	1 to 3	Morningglory, tall <sup>∞</sup>	2	1 to 2
Mustard, Species†	4	1 to 3	Nightshade, Black†	4	1 to 3	Nightshade, Eastern Black†	4	1 to 3	Nightshade, Hairy†	4	1 to 3
Pigweed, Redroot†	4	1 to 4	Pigweed, Smooth†	4	1 to 4	Pigweed, Spiny†	4	1 to 4	Poinsettia, Wild†		
Puncturevine†			Purslane, Common†			Pusley, Florida†			Sida, Prickly†‡		
Ragweed, Common <sup>∞</sup>	4	1 to 3	Ragweed, Giant∞	4	1 to 3	Sage, Barnyard	*	1 to 3	Smartweed, Ladysthumb†	4	1 to 3
Smartweed, Pennsylvania†	4	1 to 3	Spurge, Prostrate†	4	1 to 3	Spurge, Spotted†	4	1 to 3	Starbur, Bristly	2	1 to 2
Sunflower, Common†‡	4	1 to 3	Thislte, Canada	*	1 to 3	Velvetleaf†‡	4	1 to 3			

\* Suppression only.

† IMAZETHAPYR 240 SL will provide control when soil applied.

∞ IMAZETHAPYR 240 SL will provide suppression when soil applied.

 $\ddagger$  For optimal and consistent control, apply IMAZETHAPYR 240 SL as a preplant incorporated treatment. Ω Only treat moderate infestation with soil application. For optimal effectiveness, application must be preplant incorporated.

#### Grasses and Sedges Controlled

More consistent weed species control can be achieved when IMAZETHAPYR 240 SL is soil applied to grasses through preplant incorporated application.

Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)
Barnyardgrass∞	3	1 to 3	Crabgrass, Large∞	3	1 to 3	Crabgrass, Smooth <sup>∞</sup>	3	1 to 3	Cupgrass, Woolly (emerged)	3	1 to 3
Foxtail, Giant†	6	1 to 6	Foxtail, Green†	3	1 to 3	Foxtail, Robust Purple†	3	1 to 3	Foxtail, Robust White†	3	1 to 3
Foxtail, Yellow†	3	1 to 3	Goosegrass∞			Johnsongrass, Seedling†	6	1 to 8	Johnsongrass, Rhizome	*	1 to 8
Panicum, Fall∞			Panicum, Texas∞			Red Rice	3	1 to 3	Shattercane∞	6	1 to 8
Signalgrass, Broadleaf <sup>∞</sup>	4	1 to 8	Nutsedge, Purple <sup>∞</sup>	*	1 to 3	Nutsedge, Yellow <sup>∞</sup>	*				,

\* Suppression only.

† IMAZETHAPYR 240 SL will provide control when soil applied.

 $\infty$  IMAZETHAPYR 240 SL will provide suppression when soil applied.

+ For optimal and consistent control, apply IMAZETHAPYR 240 SL as a preplant incorporated treatment.

 $\Omega$  Only treat moderate infestation with soil application. For optimal effectiveness, application must be preplant incorporated.

## RED KIDNEY BEANS

#### (For use in California only)

The application solution of IMAZETHAPYR 240 SL must be combined with a non-ionic surfactant with at least 80% active ingredient at the rate of 2 pints of surfactant per 100 gallons of application solution.

Apply IMAZETHAPYR 240 SL as a postemergence application at a rate of 3 fluid ounces per acre when red kidney beans are at or beyond the 1 fully expanded trifoliate leaf growth stage and when weeds are growing actively. If Imazethapyr is applied prior to the one true leaf stage of growth, delayed maturity and/or reduced crop growth will result.

Cultivate treated areas 7 to 10 days following treatment with IMAZETHAPYR 240 SL. Cultivation will increase residual weed control, especially in dry conditions.

#### Restrictions

- Do not apply Imazethapyr to weeds and crops that are suffering stress from temperature, moisture, draught, etc.
- Do not apply IMAZETHAPYR 240 SL to Kidney Beans via aerial application.
- Do not exceed a maximum of 3 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.047 pounds of imazethapyr acid equivalent per year).
- Do not exceed a maximum of one application per year with IMAZETHAPYR 240 SL.

 There must be a minimum of 60 days between treatment with IMAZETHAPYR 240 SL and harvest of kidney beans.

#### Weeds Controlled

Treatment with IMAZETHAPYR 240 SL as a postemergence application will control/suppress the following weeds. Make applications at or prior to the listed maximum leaf stage.

Weeds	Max. Leaf Growth Stage	Height		
Kochia (non-ALS resistant)				
Mustard, Wild	1			
Nightshade, Black	4	1-3 inches		
Nightshade, Eastern Black	1			
Pigweed, Redroot	1			
Nightshade, Hairy	4	1-2 inches		

#### SNAP BEANS

#### (For use in the states of Alabama, Florida, Georgia, Illinois, Iowa, Indiana, Minnesota, Michigan, New Jersey, North Carolina and Wisconsin.)

IMAZETHAPYR 240 SL, when applied as detailed below, will provide suppression of/will reduce competition from the following weed species:

Mustard, Wild Nightshade, Eastern Black Pigweed, Redroot Purslane, Common

#### Preplant Incorporated Treatment

Apply IMAZETHAPYR 240 SL within one week of planting at a rate of 1.5 fluid ounces per acre.

When applied as a preplant incorporated treatment, IMAZETHAPYR 240 SL can be tank mixed with a registered grass herbicide. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

#### Preemergence

Apply Imazethapyr 204 SL either immediately following planting or up to a maximum of one day following planting at a rate of 1.5 fluid ounces per acre.

Preemergence treatment may be made following a preplant incorporated treatment with a registered grass herbicide. Alternatively, IMAZETHAPYR 240 SL can be tank mixed with a registered grass herbicide and applied as a preemergence treatment. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

#### Restrictions

- Do not exceed a maximum of 1.5 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.023 pounds of imazethapyr acid equivalent per year).
- Do not exceed a maximum of one application of IMAZETHAPYR 240 SL per year.
- Do not apply Imazethapyr to snap beans via aerial application.
- IMAZETHAPYR 240 SL must not be applied after July 31<sup>st</sup> in all states listed except New Jersey.
- IMAZETHAPYR 240 SL must not be applied in New Jersey after June 20<sup>th</sup>.

• There must be a minimum of 30 days between treatment with IMAZETHAPYR 240 SL and harvest of snap beans.

## **SNAP BEANS**

## (Directions for use in the states of Arkansas, Missouri, Oklahoma, Texas (counties of Bailey, Castro, Lamb and Parmer only) and New Mexico (counties of Curry and Roosevelt only).)

IMAZETHAPYR 240 SL, when applied as detailed below, will provide suppression of/will reduce competition from the following weed species:

Nightshade, Eastern Black Pigweed, Redroot

#### Restrictions

- Do not exceed a maximum of 1.5 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.023 pounds of imazethapyr acid equivalent per year).
- Do not exceed a maximum of one application of IMAZETHAPYR 240 SL per year.
- Do not apply Imazethapyr to snap beans via aerial application.
- IMAZETHAPYR 240 SL must not be applied after July 31<sup>st</sup>.
- There must be a minimum of 30 days between treatment with IMAZETHAPYR 240 SL and harvest of snap beans.

#### Postemergence

Apply Imazethapyr as a postemergence treatment at the rate of 1.5 fluid ounces per acre in a tank mixture with registered products containing bentazon. The application solution must be a combined with a nonionic surfactant that contains a minimum of 80% active ingredient at the rate of 2 pints per 100 gallons of spray solution.

Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. 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.

#### Postemergence

Make postemergence applications when snap beans have a minimum of one true leaf. Treatment prior to this growth stage will result in delayed maturity and/or reduced crop growth.

# CHICKPEAS, DRY EDIBLE PEAS, LENTILS, LIMA BEANS AND SUCCULENT PEAS,

#### (For use in the states of Idaho, Montana, Nevada, Oregon, Utah, and Washington.)

#### Restrictions

- Do not exceed a maximum of 3 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.047 pounds of imazethapyr acid equivalent per year) to beans and peas in the region specified.
- Do not exceed a maximum of one application of IMAZETHAPYR 240 SL per year.
- There must be a minimum of 60 days between treatment with IMAZETHAPYR 240 SL and harvest of chickpeas, dry edible peas, dry lima beans and lentils.
- There must be a minimum of 30 days between treatment with IMAZETHAPYR 240 SL and harvest of succulent lima beans and succulent peas.

#### Preplant Treatment (minimum tillage and no-till and systems only)

Apply IMAZETHAPYR 240 SL in the fall before planting in the spring. Moisture is necessary for the treatment to be incorporated and activated. Apply this product as a preplant treatment within 30 days prior

to planting in minimum till or no-till systems at a broadcast rate of 3 fluid ounces per acre. When IMAZETHAPYR 240 SL is applied in the fall, it must be applied prior to the ground freezing in the target area and when soil temperature at a depth of 4 inches in less than 55°F.

Weed control may be unpredictable as weather factors will influence product longevity and activity.

#### Restrictions

• When applying IMAZETHAPYR 240 SL as a preplant incorporated treatment, do not incorporate to a depth greater than 3 inches.

#### Preplant Incorporated Treatment

Apply this product as a preplant treatment within 7 days prior to planting at a broadcast rate of 3 fluid ounces per acre.

#### Restrictions

• When applying IMAZETHAPYR 240 SL as a preplant incorporated treatment, do not incorporate to a depth greater than 3 inches.

#### Preemergence Treatment

Apply IMAZETHAPYR 240 SL as a preemergence treatment following planting but before crop emergence at the broadcast rate of 3 fluid ounces per acre.

In order to control dogfennel (mayweed-chamomile) and lambsquarters, IMAZETHAPYR 240 SL may be tank mixed with registered products containing metribuzin. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

#### Postemergence Treatment (Dry Edible Peas)

Apply IMAZETHAPYR 240 SL to dry edible peas at a rate of 2 fluid ounces per acre when peas are a minimum of 3 inches in height or have a minimum of one trifoliate leaf. Application prior to this growth stage will result in delayed maturity and/or reduced crop growth. The application solution must be a combined with a nonionic surfactant that contains a minimum of 80% active ingredient at the rate of 2 pints per 100 gallons of spray solution.

In order to control weed species not specified in this label, IMAZETHAPYR 240 SL may be tank mixed with registered products containing bentazon. When IMAZETHAPYR 240 SL is mixed with registered products containing bentazon, antagonism causes a reduction in the control of grasses. Add a nitrogen-based liquid fertilizer to the application solution, but only in tank mixtures containing bentazon at a rate of 1.25 to 2.5 gallons per 100 gallons of application solution. Alternatively, combine ammonium sulfate with the application solution at the rate of 12-15 pounds per 100 gallons of spray solution.

#### Restriction

• Do make postemergence applications with IMAZETHAPYR 240 SL in chickpeas, lentils or lima beans.

#### Weeds Controlled

At the application rate of 3 fluid ounces per acre, IMAZETHAPYR 240 SL will provide control of the following weed species:

Preplant Incorporated Treatment	Preemergence Treatment				
Buckwheat, wild	Buckwheat, wild				
Kochia (non-ALS resistant)	Kochia (non-ALS resistant)				
Lambsquarters, common	Mustard, wild				
Mustard, wild	Nightshade, Black				

Nightshade, Black	Nightshade, Eastern black
Nightshade, Eastern black	Nightshade, Hairy
Nightshade, Hairy	Pigweed, redroot
Pigweed, redroot	Shepherdspurse
Shepherdspurse	Thistle, Russian
Thistle, Russian	

When applied as a postemergence treatment at the broadcast application rate of 2 fluid ounces per acre, IMAZETHAPYR 240 SL will provide control/suppression of the following weed species:

Nightshade, Black (suppression only) Nightshade, Eastern Black (suppression only) Nightshade, Hairy (suppression only) Mustard, Wild (control)

## CHICKPEAS

#### (For use in the states of Arizona and California.)

#### Restrictions

- Do not exceed a maximum of 3 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.047 pounds of imazethapyr acid equivalent per year) to chickpeas in the region specified.
- Do not exceed a maximum of one application of IMAZETHAPYR 240 SL per year.
- There must be a minimum of 60 days between treatment with IMAZETHAPYR 240 SL and harvest of dry chickpeas.
- There must be a minimum of 30 days between treatment with IMAZETHAPYR 240 SL and harvest of succulent chickpeas.

#### Preplant Incorporated Treatment

Apply IMAZETHAPYR 240 SL as a preplant incorporated treatment within a week before planting at a broadcast rate of 0-3 fluid ounces per acre. When applied as a preplant incorporated treatment, IMAZETHAPYR 240 SL may be tank mixed with a registered grass herbicide.

#### Preemergence Treatment

Apply Imazethapyr as a preemergence treatment during the period from immediately following planting to a maximum of 3 days following planting at a broadcast rate of up to 3 fluid ounces per acre.

Imazethapyr may be tank mixed with a registered grass herbicide. Alternatively, IMAZETHAPYR 240 SL may be applied as a preemergence treatment sequentially after an application with a registered grass herbicide as a preplant incorporated treatment.

Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. The most restrictive directions must apply.

#### Weeds Controlled

IMAZETHAPYR 240 SL will provide control of the following weed species:

Preplant Incorporated Treatment	Preemergence Treatment
Buckwheat, wild	Buckwheat, wild
Kochia (non-ALS resistant)	Kochia (non-ALS resistant)
Lambsquarters, common	Mustard, wild
Mustard, wild	Nightshade, Black
Nightshade, Black	Nightshade, Eastern black

Nightshade, Eastern black	Nightshade, Hairy
Nightshade, Hairy	Pigweed, redroot
Pigweed, redroot	Shepherdspurse
Shepherdspurse	Thistle, Russian
Thistle, Russian	

## EDIBLE VEGETABLE LEGUMES: RESTRICTIONS

- Snap beans, lima beans, chickpeas (in Arizona and California), Southern peas and English peas must not be harvested for a minimum of 30 days following treatment with IMAZETHAPYR 240 SL.
- Dry edible peas, lentils, chickpeas, red kidney beans, and all other dry bean or pea types specified in these directions dry edible peas, lentils, chickpeas, red kidney beans, and other dry bean or pea types listed on this label listed on this label must not be harvested for a minimum of 60 days following treatment with IMAZETHAPYR 240 SL.

## PEANUTS

#### (Not for use in California. In Arizona, use only in La Paz and Yuma counties.)

IMAZETHAPYR 240 SL will provide control of many grasses, sedges and broadleaf weed species. When heavy pressure from grass or common lambsquarters is likely, tank mix IMAZETHAPYR 240 SL with a registered soil-applied grass herbicide (see below).

Application Method	Imazethapyr 2SL Use Rate/Directions				
Preplant Incorporated					
Preemergence	4 fluid ounces per acre (broadcast rate)				
Ground Cracking					
Postemergence					
Sequential Applications:					
<ul> <li>Preplant Incorporated or Preemergence</li> <li>Ground Cracking or Postemergence</li> </ul>	2 fluid ounces per acre in a soil treatment (preplant incorporated or preemergence), then 2 fluid ounces per acre applied postemergence or at ground cracking.				

#### Restrictions

- Do not exceed a maximum of 4 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.063 pounds of imazethapyr acid equivalent per year) to peanuts.
- Peanuts must not be harvested for a minimum of 85 days following treatment with IMAZETHAPYR 240 SL.
- Treated peanut hay, straw or forage must not be used for grazing or feed.
- Do not exceed a maximum of 2 applications of MAZETHAPYR 240 SL per year (0.063 lbs of imazethapyr acid equivalent per acre per year) or any other imazethapyr product.

An application of chlorimuron ethyl may be made as a postemergence treatment after treatment with IMAZETHAPYR 240 SL.

#### Weeds Controlled: Soil Applied/At-Crack

Apply IMAZETHAPYR 240 SL as an at-crack treatment when the emerging peanut seedling cracks the soil, usually 10 to 14 days after planting. At the soil cracking stage, weeds are usually seedlings or have not germinated. If weed species have >2 true leaves, see the Weeds Controlled: Postemergence Treatment section below.

IMAZETHAPYR 240 SL will provide control/suppression of the following weed species when soil applied or as a treatment applied at ground cracking:

Broadleaf Weeds	
Alligator weed*	Pigweed, Redroot
Anoda, Spurred**	Pigweed, Smooth
Buffalobur	Pigweed,Spiny
Carpetweed	Poinsettia, wild
Cocklebur, Common***	Puncturevine
Devilsclaw	Purslane, common
Galinsoga	Pusley, Florida
Jimsonweed**	Ragweed, Common (suppression only)
Lambsquarters, Common**	Ragweed, Giant (suppression only)
Morningglory, Entireleaf***	Sida, prickly (Teaweed)**
Morningglory, Ivyleaf***	Smartweed, ladysthumb
Morningglory, Pitted***	Smartweed, Pennsylvania
Morningglory, smallflower	Spurge, Prostrate
Morningglory, tall***	Spurge, Spotted
Mustard Species	Spurge, Toothed
Nightshade, Black	Sunflower**
Nightshade, Eastern Black	Velvetleaf**
Nightshade, Hairy	

Nightshade, Hairy \*Imazethapyr provides control as an at-crack treatment only.

\*\*For optimal and consistent control, apply IMAZETHAPYR 240 SL as a preplant incorporated treatment. \*\*\*Suppression only when soil applied.

For optimal and consistent control of grasses and sedges, apply IMAZETHAPYR 240 SL as a preplant incorporated treatment.

Grasses and Sedges	
Alligator weed*	Pigweed, Redroot
Anoda, Spurred**	Pigweed, Smooth
Buffalobur	Pigweed,Spiny
Carpetweed	Poinsettia, wild
Cocklebur, Common***	Puncturevine
Devilsclaw	Purslane, common
Galinsoga	Pusley, Florida

Jimsonweed**	Ragweed, Common (suppression only)
Lambsquarters, Common**	Ragweed, Giant (suppression only)
Morningglory, Entireleaf***	Sida, prickly (Teaweed)**
Morningglory, Ivyleaf***	Smartweed, ladysthumb
Morningglory, Pitted***	Smartweed, Pennsylvania
Morningglory, smallflower	Spurge, Prostrate
Morningglory, tall***	Spurge, Spotted
Mustard Species	Spurge, Toothed
Nightshade, Black	Sunflower**
Nightshade, Eastern Black	Velvetleaf**
Nightshade, Hairy	

\*Imazethapyr provides control as an at-crack treatment only.

\*\*For optimal and consistent control, apply IMAZETHAPYR 240 SL as a preplant incorporated treatment. \*\*\*Suppression only when soil applied.

#### Weeds Controlled: Postemergence Treatment

Broadleaf weeds controlled when IMAZETHAPYR 240 SL is applied as a postemergence treatment:

Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)
Alligator Weed	4	1 to 3	Anoda, Spurred	2	1 to 2	Buffalobur	*	1 to 3	Cocklebur, Common	8	1 to 8
Jimsoweed	4	1 to 3	Lambsquarters, Common	*	1 to 2	Morningglory, Entireleaf	2	1 to 2	Morningglory, Ivyleaf	2	1 to 2
Morningglory, Pitted	2	1 to 2	Morningglory, Smallflower	4	1 to 3	Morningglory, Tall	2	1 to 2	Mustard, Species	4	1 to 3
Nightshade, Black	4	1 to 3	Nightshade, Eastern black	4	1 to 3	Nightshade, Hairy	4	1 to 3	Pigweed, Redroot	8	1 to 8
Pigweed, Smooth	8	1 to 8	Pigweed, Spiny	8	1 to 8	Ragweed, Common	4	1 to 3	Ragweed, Giant	4	1 to 3
Smartweed, Ladysthumb	4	1 to 3	Smartweed, Pennsylvania	4	1 to 3	Spurge, Prostrate	4	1 to 3	Spurge, Spotted	4	1 to 3
Starbur, Bristly	2	1 to 2	Sunflower	4	1 to 3	Velvetleaf	4	1 to 3			

\*Suppression only.

#### Grass and sedges controlled when IMAZETHAPYR 240 SL is applied as a postemergence treatment:

Weed	Max Leaf Stag e	Size (inches )	Weed	Max Leaf Stag e	Size (inches )	Weed	Max Leaf Stag e	Size (inches )	Weed	Max Leaf Stag e	Size (inches )
Barnyardgras s	3	1 to 3	Crabgrass , Large	3	1 to 3	Crabgrass, Smooth	3	1 to 3	Cupgrass, Woolly	3	1 to 3
Foxtail, Giant	6	1 to 6	Foxtail, Green	3	1 to 3	Foxtail, Yellow	3	1 to 3	Johnsongrass , Seedling	6	1 to 8
Johnsongrass , Rhizome	*	6 to 12	Red Rice	3	1 to 3	Shattercan e	6	1 to 8	Signalgrass, Broadleaf	4	1 to 6

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\*Suppression only.

In West Texas and New Mexico, wait until late cracking (most of the peanuts have emerged) before applying this product.

#### Weeds Controlled: Sequential Applications

Apply IMAZETHAPYR 240 SL as a sequential treatment as follows:

- 1. Soil apply 2 fluid ounces of IMAZETHAPYR 240 SL per acre (preemergence or preplant incorporated)
- 2. Apply 2 fluid ounces of IMAZETHAPYR 240 SL as a postemergence or ground-crack treatment.

For weeds controlled by sequential applications, refer to the Weeds Controlled: Soil Applied/At-Crack sections and tables above in the PEANUT section.

#### Yellow and Purple Nutsedge: Sequential Application

Control of purple nutsedge and yellow nutsedge is increased by sequential application of IMAZETHAPYR 240 SL. Make the second treatment prior to nutsedge exceeding the 3 leaf growth stage.

#### Tank Mix Combinations for Grass Species Control

Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. 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.

IMAZETHAPYR 240 SL may be tank mixed with specified registered products/registered product containing specified active ingredients in order to control weeds that are not specified for control by applications of IMAZETHAPYR 240 SL alone.

#### Restriction

• Tank mixtures containing registered products with trifluralin as an active ingredient must be applied as a preplant incorporated treatment only.

#### Tank Mix Combinations for Broadleaf Species Control

For control of broadleaf weeds not specified in this label, IMAZETHAPYR 240 SL may be tank mixed with registered products containing 2,4-DB and bentazon. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank mix IMAZETHAPYR 240 SL with a registered product containing 2,4-DB in order to control the following species:

- Common ragweed
- Morningglories
- Prickly sida
- Sicklepod

## SOYBEANS

# (See below for additional directions for soybeans in North Dakota and Minnesota north of Highway 210.)

Apply IMAZETHAPYR 240 SL in soybeans as one of the following treatments:

- early preplant
- preplant incorporated
- preemergence
- postemergence (including in minimum tillage and no-tillage areas)

For all applications, use a rate of 4 fluid ounces of IMAZETHAPYR 240 SL per acre.

#### **Restrictions:**

- Do not exceed a maximum of 4 fluid ounces per acre of IMAZETHAPYR 240 SL per year (0.063 pounds of imazethapyr acid equivalent per year).
- Do not exceed a maximum of one application of IMAZETHAPYR 240 SL per year.
- Soybeans must not be harvested for a minimum of 85 days following treatment with IMAZETHAPYR 240 SL.
- Applications of IMAZETHAPYR 240 SL must be made prior to soybean bloom.
- Treated soybean hay, straw or forage must not be used for grazing or feed.
- Do not tank mix IMAZETHAPYR 240 SL with products containing clomazone. Where clomazone has been applied as a soil application, IMAZETHAPYR 240 SL may be applied as a postemergence treatment.

For furrow irrigated soybeans, ensure that soil is tilled prior to planting winter wheat or barley. Break up the beds and mix the soil with tillage equipment calibrated to cut to a depth of 4-6 inches. **Weeds Controlled** 

The table below provides a list of weeds controlled by IMAZETHAPYR 240 SL. For optimal postemergence applications, suppression/control, apply IMAZETHAPYR 240 SL before target species reach the specified height below. In assessing the growth stage of weed species (leaf stage), do not count cotyledon leaves.

IMAZETHAPYR 240 SL will provide control of many grasses, sedges and broadleaf weed species. When heavy pressure from grass or common lambsquarters is likely, tank mix IMAZETHAPYR 240 SL with a registered soil-applied grass herbicide such as pendimethalin.

#### Weeds Controlled: Broadleaf Weeds

Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)	Weed	Max Leaf Stage	Size (inches)
Alligator weed	4	1 to 3	Anoda, Spurred†	4	1 to 3	Artichoke, Jerusalem	8	6 to 10	Buffalobur†‡	*	1 to 3
Carpetweed†			Cocklebur, Common†∞	8	1 to 8	Galinsoga†			Jimsonweed†‡	4	1 to 3
Kochia (non- ALS resistant)†	4	1 to 3	Lambsqusrters†‡	*	1 to 2	Mallow, Veince <sup>∞</sup>			Marshelder†	4	1 to 3
Morningglory, entireleaf <sup>∞</sup>	2	1 to 2	Morningglory, ivyleaf∞	2	1 to 2	Morningglory, pitted <sup>∞</sup>	2	1 to 2	Morningglory, smallflower†	4	1 to 3
Morningglory, tall <sup>∞</sup>	2	1 to 2	Mustard, Species†	4	1 to 3	Nightshade, Black†	4	1 to 3	Nightshade, Eastern Black†	4	1 to 3
	4	1 to 3		8	1 to 8		8	1 to 8		8	1 to 8

Nightshade, Hairy†			Pigweed, Redroot†			Pigweed, Smooth†			Pigweed, Spiny†		
Poinsettia, Wild†			Puncturevine†			Purslane, Common†			Pusley, Florida†		
Sida, Prickly†‡			Ragweed, Common <sup>∞</sup>	*	1 to 3	Ragweed, Giant∞	*	1 to 3	Sage, Barnyard	1 to 3	
Smartweed, Ladysthumb†	4	1 to 3	Smartweed, Pennsylvania†	4	1 to 3	Spurge, Prostrate†	4	1 to 3	Spurge, Spotted†	4	1 to 3
Starbur, Bristly	2	1 to 2	Sunflower, Common†‡	4	1 to 3	Thislte, Canada	*	1 to 3	Velvetleaf†‡	4	1 to 3

\* Suppression only.

† IMAZETHAPYR 240 SL will provide control when soil applied.

 $\infty$  IMAZETHAPYR 240 SL will provide suppression when soil applied.

+ For optimal and consistent control, apply IMAZETHAPYR 240 SL as a preplant incorporated treatment.

 $\Omega$  For optimal effectiveness, application must be preplant incorporated.

#### Weeds Controlled: Grass Weeds and Sedges

More consistent weed species control can be achieved when IMAZETHAPYR 240 SL is soil applied to grasses through preplant incorporated application.

Weed	Max Leaf Stage	Size, inches	Weed	Max Leaf Stage	Size, inches	Weed	Max Leaf Stage	Size, inches	Weed	Max Leaf Stage	Size, inches
Barnyardgrass∞	3	1 to 3	Crabgrass, Large∞	3	1 to 3	Crabgrass, Smooth∞	3	1 to 3	Cupgrass, Woolly (emerged)	3	1 to 3
Foxtail, Giant†	6	1 to 6	Foxtail, Green†	3	1 to 3	Foxtail, Yellow†	3	1 to 3	Goosegrass ∞		
Johnsongrass, Seedling†	6	1 to 8	Johnsongrass, Rhizome	*	6 to 12	Millet, Wild Proso∞	*	1 to 3	Panicum, Fall∞		
Panicum, Texas∞			Red Rice	3	1 to 3	Shattercane ∞	6	1 to 8	Signalgrass, Broadleaf∞	4	1 to 8
Nutsedge, Purple∞	*	1 to 3	Nutsedge, Yellow∞	*	1 to 3						

\* Suppression only.

† IMAZETHAPYR 240 SL will provide control when soil applied.

∞ IMAZETHAPYR 240 SL will provide suppression when soil applied.

 $\ddagger$  For optimal and consistent control, apply IMAZETHAPYR 240 SL as a preplant incorporated treatment.  $\Omega$  For optimal effectiveness, application must be preplant incorporated.

#### Tank Mixtures for Grass Weeds

IMAZETHAPYR 240 SL can be tank mixed with a registered grass herbicide in order to provide control of grass weed species not listed in this label. Tank mixtures may also increase control of some broadleaf target species (e.g. pigweeds and common lambsquarters).

Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. 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.

Imazethapyr may be tank mixed with specified registered products/registered product containing specified active ingredients in order to control weeds listed below that are not specified for control by applications of IMAZETHAPYR 240 SL alone:

#### Restrictions

- Tank mixtures containing registered products with Trifluralin as an active ingredient must be applied as a preplant incorporated treatment only.
- Do not tank mix IMAZETHAPYR 240 SL with products containing clomazone has been applied as a soil application, IMAZETHAPYR 240 SL may be applied as a postemergence treatment.

#### Tank Mixing IMAZETHAPYR 240 SL with registered products containing sethoxydim

IMAZETHAPYR 240 SL may be tank mixed with registered products containing sethoxydim in order to increase control of grass weed species, particularly where infestation of grass is heavy and for grass species not specified in this label. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### Tank Mixtures for Broadleaf Weeds

IMAZETHAPYR 240 SL can be tank mixed with registered products containing the following active ingredients in order to enhance control of broadleaf weed species:

- bentazon lactofen
- fomesafen
- paraquat

IMAZETHAPYR 240 SL can be tank mixed with glyphosate for control of broadleaf species in glyphosate soybeans.

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

#### Tank Mixtures with Products Containing Sulfentrazone

This product may be tank mixed for application with registered products containing sulfentrazone in order to enhance control of weed species in soybeans.

Alternatively, IMAZETHAPYR 240 SL may be applied postemergence, sequentially to soybeans that have been treated with a registered product containing sulfentrazone.

#### Restriction

 Registered products containing sulfentrazone are only specified for use in soil applications in soybeans.

#### Tank Mixture with registered products containing imazaquin (Regions 2 and 3)

IMAZETHAPYR 240 SL may be tank mixed with registered products containing imazaquin in Region 2 and 3 in order to enhance control of common sunflower and volunteer corn. This tank mixture may also be applied in South Dakota in the following counties: Bon Homme, Davison, Hanson, Hutchinson, Kingsbury, Lake, McCook, Miner and Yankton.

This tank mixture will provide suppression of volunteer corn when applied to volunteer corn no greater than 10 inches in height.

This tank mixture will enhance control of common sunflowers when applied to sunflowers no greater than 3 inches in height.

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

#### Restrictions

• This tank mixture must not be applied in North Dakota or in Minnesota north of Highway 210.

## SOYBEANS (North Dakota and Minnesota north of Highway 210.)

Apply IMAZETHAPYR 240 SL in North Dakota and Minnesota north of Highway 210, as a postemergence treatment only at a rate of 3 fluid ounces per acre.

Weed Species	Application Size (in inches)	Max. Leaf Growth Stage (in leaves)
Cocklebur, Common*	4	1-4
Pigweed, Redroot		
Kochia (non-ALS resistant)		
Mustard, Species		
Nightshade, Black	4	1-3
Nightshade, Eastern black		
Nightshade, Hairy		
Wild oats (reduced competition)	3	1-4

## **ROTATIONAL CROPS: POST APPLICATION PLANTING INTERVALS**

In most cases, normal growth of rotational crops can be expected when IMAZETHAPYR 240 SL is used in accordance with this label. However, crop damage is always a risk due to possible variations in and extremes of agronomic and environmental factors.

The following crops can be planted following an application of IMAZETHAPYR 240 SL at the specified interval:

#### Restriction

- Do not plant crops prior to the end of the specified interval or crop injury may result.
- Refer to the Rotational Crops: Exceptions section for additional intervals.

Сгор	Post Application Interval
Lima beans	
Peanuts	Crops may be planted immediately after application
Southern peas	of IMAZETHAPYR 240 SL
Soybeans	
Alfalfa	
Edible beans and peas <sup>1*</sup>	
Clover	4 Months after application of IMAZETHAPYR 240
Rye**	SL
Wheat <sup>1</sup>	

Field corn <sup>1</sup>	8 1/2 Months after application of IMAZETHAPYR
Field corn grown for seed <sup>1</sup>	240 SL
Barley <sup>1</sup>	9 1/2 Months after application of IMAZETHAPYR
Tobacco	240 SL
Cotton <sup>1***</sup>	
Lettuce	
Oats	
Popcorn	18 Months after application of IMAZETHAPYR 240
Rye****	SL
Safflower	
Sorghum	
Sunflower	
Sweet Corn	
Flax	26 Months after application of IMAZETHAPYR 240
Potatoes	SL
All crops not listed elsewhere in this table*****	40 Months after application of IMAZETHAPYR 240 SL

\* Not Southern peas and lima beans

\*\*Except in North Dakota and Minnesota north of Highway 210

\*\*\*See below for details on a Cotton Rotation Interval after treatment with IMAZETHAPYR 240 SL to clover or alfalfa grown for seed.

\*\*\*\*In North Dakota and Minnesota north of Highway 210

\*\*\*\*\*Prior to planting crops not listed in the above table, 40 months after treatment with IMAZETHAPYR 240 SL, a field bioassay must be completed consisting of the following: In the previously treated area, a test strip (which must contain variation in soil pH and soil type, as well as knolls and low areas) must be planted with the intended rotational crop and grown to maturity. If there is no crop injury in the test strip after the crops have reached maturity, the intended rotational crop may be planted in the previously treated area area the next year.

<sup>1</sup> Refer to the Rotation Crops: Exceptions section for additional intervals.

The yield of some crops (e.g. sugar beets) may be reduced when soil pH is less than 6.5. If lime is applied to the area in order to adjust soil pH before rotational crops not listed in this section are planted, the lime treatment must take place a minimum of 12 months before the rotational crop is planted.

Crop	Use Directions					
Barley	In Delaware, Indiana, Kentucky, Maryland, New Jersey, Ohio, Pennsylvania, and					
	Virginia: Plant barley a minimum of 4 months after treatment with IMAZETHAPYR 240 SL.					
	In North Dakota: Plant barley a minimum of 18 months after treatment with IMAZETHAPYR 240 SL.					
	When Imazethapyr is applied to edible legumes at a rate not exceeding 3 fluid ounces per acre, do not plant barley for a minimum of 4 months after treatment.					
Chickpeas, Lentils,	When Imazethapyr is applied to edible legumes at a rate not exceeding 3 fluid ounces per acre, chickpeas, lentils and peas maybe planted immediately after treatment.					
Peas						
Corn Inbred Lines	Plant corn inbred seed lines in the season following application of IMAZETHAPYR 240 SL.*					
Sweetcorn** Popcorn**	In Illinois, Indiana, Iowa, Minnesota, Ohio, Tennessee and Wisconsin: Plant sweetcorn and popcorn varieties in the season following application of					

#### **Rotational Crops: Exceptions**

Bahiagrass, Cabbage, Cantaloupe, Cucumber, Irish potato, Onion, Sweet potato transplants, Sweet pepper transplants, Tomato transplants, Watermelon	<ul> <li>IMAZETHAPYR 240 SL. Some crop damage may occur in popcorn and sweetcorn planted within 18 months of treatment with this product.</li> <li>Restriction <ul> <li>Fresh market sweetcorn varieties must be planted a minimum of 18 months after an application of IMAZETHAPYR 240 SL.</li> </ul> </li> <li>In Alabama, Delaware, Florida, Georgia, Indiana, Kentucky, Maryland, New Jersey, North Carolina, Pennsylvania, South Carolina, and Virginia: Do not plant until a minimum of 18 months following an application with IMAZETHAPYR 240 SL.</li> </ul>
Cotton	In North Carolina, South Carolina and Virginia: In areas where IMAZETHAPYR 240 SL has been applied to peanuts in the previous season in sandy loam/loamy sand and where there has been more than 16 inches of irrigation/rain between treatment and October in the same year of application, cotton can be planted a minimum of 9 1/2 months following treatment. <b>Cotton Rotation Interval Based on Precipitation/Irrigation</b> The following are the crop rotation intervals following application of IMAZETHAPYR 240 SL in clover or alfalfa grown for seed. The following guidance does not apply to clover/alfalfa grown for forage or hay. Where precipitation/irrigation requirements are less than 36" or 3 acre feet of water, crops may be planted 40 months after application of IMAZETHAPYR 240 SL. Where precipitation/irrigation requirements are equal to or more than 36" or 3 acre feet of water, 240 SL.
Field Corn, Field Corn Grown for Seed	In Arizona, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming: Do not plant until a minimum of 9 1/2 months following an application with IMAZETHAPYR 240 SL.
Snap Beans	When Imazethapyr is applied at a rate of 1.5 fluid ounces per acre or less, snap beans may be planted immediately after treatment. When Imazethapyr is applied to edible legumes at a rate not exceeding 3 fluid ounces per acre, do not plant snap beans for a minimum of 3 months after treatment.
Wheat	East of highway I-35: Do not plant wheat for a minimum of 3 months following application of IMAZETHAPYR 240 SL.

\*Applicators must contact the seed company for directions on planting corn grown for seed in areas which have been treated with IMAZETHAPYR 240 SL in the previous season. Crop damage is always a risk due to possible variations in and extremes of agronomic and environmental factors, as well as variations in agronomic practices. Planting seed corn inbreds into areas previously treated with IMAZETHAPYR 240 SL is at the sole risk of the applicator.

\*\*Contact the processor company/popcorn company for directions on crop tolerance when planning to plant popcorn or sweetcorn the season following an application of IMAZETHAPYR 240 SL. Crop damage (delayed maturity/stunting) is always a risk due to possible variations in and extremes of agronomic and

environmental factors, as well as variations in agronomic practices. Planting popcorn or sweetcorn varieties into areas previously treated with IMAZETHAPYR 240 SL is at the sole risk of the applicator.

#### **RESTRICTIONS (ALL CROPS)**

Applications of products containing the following active ingredients at their full specified rates and made in the same year as an application of IMAZETHAPYR 240 SL will increase the likelihood of crop damage to sensitive follow crops. Consult all labels of product(s) used in combination/sequence with IMAZETHAPYR 240 SL.

Active Ingredient
chlorimuron ethyl
chloransulam-methyl
flumetsulam
imazaquin
imazethapyr

- Only rotational crops that have been harvested at maturity can be used for food or feed.
- Soybeans, and peanuts can be replanted in the event of crop loss due to weather.
- Soil must not be worked to a depth greater than 2 inches.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

#### CONTAINER HANDLING:

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank 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 incineration, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Refillable Container:** Refillable container. Refill this container with IMAZETHAPYR 240 SL. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with

the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions 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**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ADAMA makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ADAMA is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ADAMA disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ADAMA's election, the replacement of product

# Optional Text for Import Labels: [Shipped for further labeling and packaging/ NOT INTENDED FOR USE BY CONSUMER]

FullPage<sup>™</sup> is a trademark of RiceTec AG. PREFACE<sup>™</sup> and POSTSCRIPT<sup>™</sup> are trademarks of an ADAMA group company.

IMAZETHAPYR 240 SL (66222-248): SAL 12-05-2017; AMEND 12-13-2017

Group

Herbicide

# **IMAZETHAPYR 240 SL**

## (Alternate Brand Name: IMAZETHAPYR 2 SL, PREFACE)

## Herbicide for the FullPage<sup>™</sup> Rice Cropping Solution

FOR USE ONLY ON FULLPAGE™ RICE CROPPING SOLUTION VARIETIES

## AND HYBRIDS (NOT LESS THAN 75% HYBRID SEED)

### ACTIVE INGREDIENT:

Ammonium salt of imazethapyr (±)-2-[ 4,5-dihydro-4-methyl-4-( I-methylethyl)-	
5-oxo-IH-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid*	22.87%
OTHER INGREDIENTS:	77.13%
TOTAL:	

\*Equivalent to 21.6% or 2 pounds per U.S. gallon or 240 grams per liter of imazethapyr acid.

#### EPA Reg. No. 66222-248

EPA Est. No.\_\_\_\_\_

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Manufactured For: Makhteshim Agan of North America, Inc.(d/b/a ADAMA) 3120 Highwoods Blvd., Suite 100 Raleigh, NC 27604 How can we help? 1-866-406-6262

NET CONTENTS: \_

## KEEP OUT OF REACH OF CHILDREN

## **CAUTION/PRECAUCION**

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.)

	FIRST AID		
IF ON SKIN OR	Take off contaminated clothing.		
CLOTHING	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>		
	• Remove contact lenses, if present, after the first 5 minutes, then continue		
	rinsing eye.		
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
IF INHALED	Move person to fresh air.		
	• If person is not breathing, call 911 or an ambulance, then give artificial		
	respiration, preferably mouth-to-mouth, if possible.		
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>		
HOT LINE NUMBER			
	container or label with you when calling a poison control center or doctor or going for		
treatment. You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment			
information.			

#### In case of spills, fire, leaks or accidents call 1-800-535-5053.

Optional Text for Label Booklet: [For additional precautionary, handling, and use statements, see inside of this booklet.]

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves such as butyl rubber ≥14 mils, or natural rubber ≥14 mils, or neoprene rubber ≥14 mils, or nitrile rubber ≥14 mils
- Shoes plus socks

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

#### USER SAFETY RECOMMENDATIONS

Users should:

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

## ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas or rinsate below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

#### **Groundwater Advisory and Proper Handling Instructions**

This chemical has properties and characteristics associated with chemicals detected in groundwater. This use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes or reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum, 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum

containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

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

This product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide spray mixture.

## PHYSICAL AND CHEMICAL HAZARDS

Do not use with or store near oxidizing agents.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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), notification to workers, 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 4 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

Coveralls

• Chemical resistant gloves such as butyl rubber  $\geq$ 14 mils, or natural rubber  $\geq$ 14 mils, or neoprene rubber

>14 mils, or nitrile rubber >14 mils

• Shoes plus socks

## **PRODUCT INFORMATION**

IMAZETHAPYR 240 SL herbicide for FullPage<sup>™</sup> rice can be applied preplant incorporated (PPI) up to 7 days prior to rice planting, preemergence and postemergence for weed control in only FullPage rice hybrids (not less than 75% hybrid seed) and varieties labeled as FullPage and warranted by the seed company to possess tolerance to direct application of PREFACE and POSTSCRIPT herbicides. Do not apply IMAZETHAPYR 240 SL herbicide to rice varieties and hybrids (less than 75% hybrid seed) that lack tolerance to the FullPage rice cropping solution or rice may be damaged or killed.

Contact your seed supplier, chemical dealer or ADAMA to obtain information regarding FullPage rice cropping solution.

Adhere to Part 201.11a Hybrid of the Federal Seed Act Regulations, labeling agricultural seeds: If any one kind or kind and variety of seed present in excess of 5 percent is "hybrid" seed, it shall be designated

"hybrid" on the label. The percentage that is hybrid shall be at least 95 percent of the percentage of pure seed shown, unless the percentage of pure seed which is hybrid seed is shown separately. If two or more kinds or varieties are present in excess of 5 percent and are named on the label, each that is hybrid shall be designated as hybrid on the label. Any one kind or kind and variety that has pure seed which is less than 95 percent but more than 75 percent hybrid seed as a result of incompletely controlled pollination in a cross shall be labeled to show (a) the percentage of pure seed that is hybrid seed or (b) a statement such as "Contains from 75 percent to 95 percent hybrid seed." No one kind or variety of seed shall be labeled as hybrid if the pure seed contains less than 75 percent hybrid seed.

IMAZETHAPYR 240 SL kills weeds by root and/or foliage uptake and rapid translocation to the growing points. Adequate soil moisture is important for optimum IMAZETHAPYR 240 SL activity. When adequate soil moisture is present, IMAZETHAPYR 240 SL will provide residual control of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil. Activity of IMAZETHAPYR 240 SL on susceptible weeds is usually visible in 10 to 14 days.

Crops growing under stressful environmental conditions can exhibit various injury symptoms which may be more pronounced if herbicides are used. FullPage rice plants treated with IMAZETHAPYR 240 SL may exhibit a slight height reduction. Such effects occur infrequently and are temporary. Normal growth and appearance should resume within 2 to 4 weeks.

IMAZETHAPYR 240 SL can be applied to FullPage rice under all tillage systems, drill or broadcast dry-seeded and water-seeded sytems. The use rate and timing of application may vary with these production systems. IMAZETHAPYR 240 SL must be applied twice per year to control the weeds listed in the WEEDS CONTROLLED section of this label.

Use of IMAZETHAPYR 240 SL in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible. Under some conditions (such as heavy texture soil, high organic matter or low pH), IMAZETHAPYR 240 SL may cause injury to subsequent planted crops. Vegetable crops, cotton and non-FullPage rice are sensitive to IMAZETHAPYR 240 SL residues in the soil.

#### Replanting

If replanting is necessary in a field previously treated with IMAZETHAPYR 240 SL, the field may be replanted to FullPage rice, lima beans, peanuts, Southern peas, or soybeans. Rework the soil no deeper than the treated zone. DO NOT apply a second treatment of IMAZETHAPYR 240 SL or other imidazolinone-containing product.

#### RESTRICTIONS

- Do not apply this product in a manner that will contact workers or others directly or through drift.
- Do not use water from IMAZETHAPYR 240 SL-treated rice fields to irrigate food or feed crops that are not registered for use with IMAZETHAPYR 240 SL herbicides.
- Do not use flood water as a water source for livestock.
- Do not apply more than 0.188 lb of imazethapyr per acre per year to FullPage rice varieties or hybrids.
- Do not apply more than 0.094 lb imazethapyr per acre in a single application to FullPage varieties or hybrids.
- Wait at least 5 days between first and second application.
- Do not make more than 2 applications of IMAZETHAPYR 240 SL in a year.
- Do not use or sell this product in Long Island, New York State.

Label directions must be with the applicator when treatment takes place, and must be read and followed in full. Application of IMAZETHAPYR 240 SL in any way that is not in accordance with these directions may cause crop injury.

Treatment with IMAZETHAPYR 240 SL will provide residual control of listed germinating target species when there is sufficient moisture.

Apply postemergence treatments to rice at the spike to 2-leaf and 3 to 5 leaf stages. There must be preharvest interval of at least 45 days between the last application of IMAZETHAPYR 240 SL and rice harvest when total amount of imazethapyr is equal to or less than 0.125 lb per acre per year.

There must be preharvest interval of at least 85 days between the last application of IMAZETHAPYR 240 SL and rice harvest when total amount of imazethapyr is greater than 0.125 lb per acre per year

#### Crop Growth Following Treatment

Normal growth of rotational crops should take place following applications of IMAZETHAPYR 240 SL. However, it is impossible to anticipate and eliminate all risk factors brought about by varying environmental and agronomic conditions. Rotational crop injury therefore may result from treatment with IMAZETHAPYR 240 SL.

A combination of treatment with this product and certain conditions, such as high organic matter in the soil, low soil pH, heavy soil texture or low rainfall, may cause damage to crops that are subsequently planted.

#### Mode of Action

Treatment with IMAZETHAPYR 240 SL provides control through the AHAS/ALS enzyme inhibiting mode of action. Application of IMAZETHAPYR 240 SL works by uptake of the treatment by target species through foliage and/or roots and then translocates quickly to the growing points. For optimal mode of action, soil must be moist prior to application.

Applications of IMAZETHAPYR 240 SL may cause internode shortening and/or yellowing of desirable vegetation. These effects, when they occur, are temporary and normal growth should resume 1-2 weeks following treatment. Sugar beets and other vegetable crops are susceptible to residues of IMAZETHAPYR 240 SL in the soil.

#### **RESISTANCE MANAGEMENT**

IMAZETHAPYR 240 SL is a Group 2 Herbicide which contains the active ingredient imazethapyr. Following many years of continuous use of this product and chemically related products biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides.—Any weed population may contain or develop plants naturally resistant to IMAZETHAPYR 240 SL and other Group 2 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. Resistance may be suspected if the following three conditions are noted: 1. A patch of weeds were not controlled by the application of the proper rate of the herbicide to properly-sized weeds under the proper growing conditions. 2. Some treated weeds (of the same size and species) are controlled while other adjacent weeds are not controlled. 3. A patch of weeds that are ordinarily controlled seems to escape treatment for multiple years and the patch seems to grow. For all herbicides, a good scouting program is needed to monitor for potential escapes and resistance.

Fields should be scouted prior to application to identify the weed species present and their growth state to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective.

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

• Rotate the use of IMAZETHAPYR 240 SL or other Group 2 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

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

(I) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;

(2) a spreading patch of non-controlled plants of a particular weed species;

(3) surviving plants mixed with controlled individuals of the same species.

- If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

If resistance is known or suspected, we recommend the use of this product in combinations or in sequence with other registered herbicides which are not solely a Group 2 Herbicide. If resistant biotypes are expected to be present in dense infestations, use a registered herbicide which is not solely a Group 2 Herbicide and consult with your state Agricultural Extension Service for specific recommendations. Hand rouging of escaped red rice and weedy rice is recommended.

Report any incidence of non-performance of this product against a particular weed species to your ADAMA retailer, representative, or call 1-866-406-6262. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.

#### Replanting

When replanting an area previously treated with IMAZETHAPYR 240 SL, the following crops may be planted:

peanuts	lima beans
southern peas	soybeans

#### Restrictions

- Do not rework the soil any deeper than the treated zone.
- Do not apply this product a second time.

Refer to individual crop sections and the Rotational Crop section for minimum replanting intervals following treatment.

## **APPLICATION PROCEDURES**

IMAZETHAPYR 240 SL can be applied to FullPage rice under all tillage and seeding systems, but must be applied to FullPage rice. For adequate weed control, two applications of either PREFACE or POSTSCRIPT must be made in the following manner: PREFACE followed by PREFACE, PREFACE followed by POSTSCRIPT or POSTSCRIPT followed by PREFACE.

The initial application may be made preplant-incorporated or preemergence or early postemergence and the second application must be made immediately before the establishment of the permanent flood.

Existing grass and weeds must be controlled before planting ("Start clean") by a typical reduced-tillage/notill burndown program.

For preplant incorporated applications the soil must be in optimal conditions with no clods. Apply IMAZETHAPYR 240 SL and incorporate to a 2" depth with at least one pass with a field cultivator. Do not use a disk as this typically cuts too deep and does not thoroughly mix the IMAZETHAPYR 240 SL with the soil. Preplant incorporated applications must be made within 7 days of planting.

Preemergence applications must be made after rice planting and before emergence. Add a typical, registered burndown herbicide if any weeds are present at the time of planting. Rice must not have emerged if a burndown herbicide is used. Other herbicides labeled for preemergence use in rice may be tank mixed with IMAZETHAPYR 240 SL and are recommended for added barnyardgrass control.

Activating rainfall or a flush is critical for both preplant incorporated and preemergence applications. A rainfall of at least  $\frac{1}{2}$ " or a flush must occur within 3 days of planting.

Postemergence applications should be made to small, actively growing barnyardgrass and red rice at the 1-2 leaf weed stage- with the second application targeting newly emerged barnyardgrass- again at the 1 to 2-leaf weed stage. Good soil moisture and active growing conditions are required. After the initial application, a rainfall or flush is needed to activate the residual activity of IMAZETHAPYR 240 SL After the second application, the permanent flood should be established as soon as possible.

As with most rice herbicide programs timing, application to small, actively growing weeds and timely establishment of the flood after the second IMAZETHAPYR 240 SL or POSTSCRIPT\* application is critical. In a sequential-post program the second application should ideally be made from 10 to 14 days after the first application. Excessive delays will allow both weed germination and the opportunity for weeds to become too large to be controlled.

\*FullPage rice must be treated with ADAMA-brand POSTSCRIPT herbicide. Other imazamox-containing herbicides may not be used.

#### WEED CONTROL PROGRAMS AND WEEDS CONTROLLED

IMAZETHAPYR 240 SL may be used in programs or tank mixtures with most other rice herbicides. Additional modes of action are encouraged for the sake of resistance management. Use caution when using with halosulfuron, bensulfuron, bispyribac and penoxsulam herbicides. These herbicides are also ALS-inhibiting herbicides, and if used, fields should be scouted and escapes removed as part of a resistance management program. Clomazone, pendimethalin, quinclorac, and propanil are beneficial mix partners for improved grass control as well as broadleaf control from quinclorac and propanil. IMAZETHAPYR 240 SL does not control legume weeds (such as hemp sesbania and jointvetch). A herbicide with activity on those weeds should be included in the weed control program. Use caution when mixing IMAZETHAPYR 240 SL with fenoxaprop and cyhalofop herbicides as grass control from the fenoxaprop and cyhalofop could be reduced. When tank mixing, read and follow all label directions for both mix partners. When restrictions differ between labels, follow the more restrictive label.

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

#### RESTRICTIONS

Do not apply IMAZETHAPYR 240 SL to rice growing under stress from injury from other herbicides, cooler weather, fertility problems including excess salinity. Crop injury can occur if FullPage rice is growing under stressed conditions.

#### Weeds Controlled

When applied sequentially as directed in the **USE DIRECTIONS** section of this label, IMAZETHAPYR 240 SL herbicide for FullPage rice will control the following weeds:

Weeds controlled by two properly timed <sup>*</sup> applications of IMAZETHAPYR 240 SL			
Weed	Maximum No. Leaves	Maximum height (inches)	
Barnyardgrass	4	4	
Large Crabgrass	3	3	
Seedling Johnsongrass	4	5	
Red Rice	4	5	
Shattercane	4	6	
Broadleaf signalgrass	3	2	
Sprangletop Species**	Suppression only		
Pitted, palmleaf and cypressvine morningglory.	3	2	
Smartweed species	4	3	
Nutsedge, species	4	3	
Rice flatsedge	4	3	

\*It is essential that the initial IMAZETHAPYR 240 SL application is activated by flushing the rice field or by adequate rainfall. To maintain herbicidal activity until a permanent flood is established, subsequent flushing or rainfall is necessary after the second application of imazethapyr.

\*All postemerence applications must occur prior to tillering to control grasses.

\*Preplant incorporated treatments of IMAZETHAPYR 240 SL provide consistent grass control only if thoroughly incorporated in clod-free soil.

\*\*Heavier sprangletop infestations will need the addition of other herbicides to the program such as fenoxaprop or cyhalofop. Pendimethalin and propanil herbicides may also assist with sprangletop control.

When applied as directed in the **USE DIRECTIONS** section of this label IMAZETHAPYR 240 SL will suppress the following weeds:

Suppressed Weeds:

Alligatorweed Spreading Dayflower Ducksalad Eclipta Mexicanweed Entireleaf and Ivyleaf morningglory Tall morningglory Purple ammannia (redstem) Texasweed Waterplantain (Common arrowhead)

## HERBICIDE COMBINATIONS

Herbicide	Target weeds	Special Notes:
acifluorfen	Postemergence control of hemp sesbania	
bentazon	Postemergence control of dayflower, ducksalad, eclipta, redstem, smartweed, water plantains and nutsedge.	Do not add Crop Oil Concentrate
acifluorfen + bentazon premixes	Dayflower, morningglory, smartweed, hemp sesbania and cocklebur.	
carfentrazone	Postemergence control of hemp sesbania, morningglories	Nonionic Surfactant (at least 80%) at 0.25% v/v or 1 quart/100 gallons of spray solution.
pendimethalin	Residual control of barnyardgrass, sprangletop and red rice.	
propanil	Postemergence control of barnyardgrass, sprangletop, hemp sesbania, Mexicanweed and redweed.	Follow propanil label for the addition of nonionic surfactant. Do not add adjuvants for EC or adjuvant-containing propanil formulations.
quinclorac	Postemergence and residual control of barnyardgrass, morningglories, eclipta, jointvetch and hemp sesbania.	Crop Oil Concentrate at 1 to 2 pt/A

#### **APPLICATION RESTRICTIONS**

Applications of the products containing the following active ingredients at their full specified rates and made in the same year as an application of IMAZETHAPYR 240 SL will increase the likelihood of crop damage to sensitive follow crops. Consult all labels of product(s) used in combination/sequence with IMAZETHAPYR 240 SL.

Active Ingredient
Chlorimuron ethyl
Chloransulam-methyl
Flumetsulam
Imazaquin
imazethapyr

- Only rotational crops that have been harvested at maturity can be used for food or feed.
- Soybeans and peanuts can be replanted in the event of crop loss due to weather.
- Soil must not be worked to a depth greater than 2 inches.

## USE DIRECTIONS

- Apply IMAZETHAPYR 240 SL at a 4 to 6 fluid ounce per acre rate (0.0625 to 0.094 lb ai/A) to FullPage rice hybrids and varieties.
- Use higher rates for larger and denser weed control infestations.
- Do not apply more than 12 fluid ounces per acre per year (0.188 lb ai/A) or more than two applications.
- For adequate weed control, two applications of either PREFACE or POSTSCRIPT must be made in the following manner: PREFACE followed by PREFACE, PREFACE followed by POSTSCRIPT or POSTSCRIPT followed by PREFACE.
- Do not exceed a maximum of 2 applications of IMAZETHAPYR 240 SL per year (0.188 lbs of imazethapyr acid equivalent per acre per year.
- Wait at least 5 days between the first and second application.

#### Adjuvants

When applying IMAZETHAPYR 240 SL as a postemergence treatment it must be combined with a quality crop oil concentrate adjuvant at a rate of 1% V/V, except for the following tank mixtures: If an EC propanil product with adjuvants are being used, no adjuvant is needed. If carfentrazone is being used in tank mixture, use a nonionic surfactant at 0.25% V/V (or 1 quart per 100 gallons), if bentazon is being used, do not add crop oil concentrate.

## MIXING INSTRUCTIONS

- 1. Fill mix tank half full with clean water.
- 2. Add the specified amount of IMAZETHAPYR 240 SL while agitating the solution.
- 3. Add specified adjuvants while continuing agitation.
- 4. Fill the remaining volume with clean water.

Containers containing IMAZETHAPYR 240 SL must be closed securely in order to prevent contamination and spills.

Application equipment must be drained and cleaned thoroughly prior to mixing the application solution and treatment. Application equipment must also be drained and thoroughly cleaned following treatment to avoid contamination and future crop injury.

#### Tank Mixtures

IMAZETHAPYR 240 SL may be tank mixed with registered organo-phosphate or carbamate insecticide products. When applied in crops, temporary crop damage may result. Read and follow the label instructions of all tank mix partners. Ensure the product(s) used are labeled for the intended use and mixture. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### Tank Mix Procedure

- 1. Fill tank with clean water.
- 2. Combine soluble packet products whilst agitating and thoroughly mix.
- 3. Add ingredients not in soluble packets:
  - Dispersible granules (DG)
  - Dry flowables (DF)
  - Wettable powders (WP)
  - Liquid flowables
  - Continue agitation and mix thoroughly.
- 4. Add IMAZETHAPYR 240 SL and other aqueous solution product(s). Continue agitation and mix thoroughly.

- 5. Add emulsifiable concentrate (EC) products. Continue agitation and mix thoroughly.
- 6. Add crop oil or surfactant as appropriate. Continue agitation and mix thoroughly.
- 7. Fill the remaining tank volume with clean water. Continue agitation and mix thoroughly.

## SPRAY APPLICATIONS

#### **Ground Applications**

Apply IMAZETHAPYR 240 SL in a minimum of 10 gallons of water per acre. Apply solution at 20-40 psi, at a sufficient boom height to ensure uniform coverage of target species foliage.

When applying IMAZETHAPYR 240 SL to no-till crop areas, use a minimum of 20 gallons of water per acre for sufficient coverage of target species. Apply IMAZETHAPYR 240 SL in higher volume where there is dense crop residue and/or target species foliage.

#### RESTRICTIONS

- For postemergence applications, only use flat fan nozzles.
- Do not overlap spray applications.
- Do not apply IMAZETHAPYR 240 SL when wind speed exceeds 10 mph or when spray may drift to sensitive crops (e.g. sugar beets and leafy vegetables).

#### **Aerial Application**

Unless otherwise directed, IMAZETHAPYR 240 SL may be applied by air in a minimum of 5 gallons of water per acre.

For optimal effectiveness when applying IMAZETHAPYR 240 SL as a postemergence treatment, add a crop oil concentrate to the application solution at 1.25 gallons per 100 gallons of spray solution, with the following exceptions: If tank mixing with an EC propanil formulation that contains surfactants, do not add additional surfactant. If tank mixing with carfentrazone, us a nonionic surfactant at 1 quart per 100 gallons of spray solution.

Follow drift management directions in order to avoid contact with and damage to crops.

Note: drift management directions do not apply to dry formulation applications; public health uses or forestry treatments.

#### RESTRICTIONS

- Do not apply IMAZETHAPYR 240 SL by aerial application when the wind speed is greater than 5 mph if conditions for temperature inversions exist or spray may be carried to sensitive crops. Avoid contact with non-target species through drift or otherwise. Applicators are responsible for assessing application conditions and equipment in order to avoid drift.
- On the boom, the distance of the outer most nozzles must not exceed 75% the length of the wingspan or rotor.
- Spray nozzles must always be parallel with the air stream and must point backwards.
- Spray nozzles must not be pointed downwards more than 45 degrees.

More restrictive directions imposed by states must be followed.

#### Aerial Drift Reduction Advisory:

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

#### **Controlling Droplet Size**

• Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Increase water volume to at least 10 gallons of water per acre if grass foliage or crop canopy is dense.

• Pressure - Do not exceed the nozzle manufacturer's specific pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

• Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.

• Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the specified practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

• Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### Boom Length

For some use patterns, reducing the effective boom length to less than 75% of the wingspan or rotor length may further reduce drift without reducing swath width.

#### **Application Height**

Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

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

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

#### **Temperature and Humidity**

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

#### **Temperature Inversions**

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

#### Sensitive Areas

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

In addition, the applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

#### STEWARDSHIP

Proper stewardship of all herbicides is important. The FullPage rice cropping solution has the additional stewardship requirement that growers prevent and monitor for outcrossing which can produce herbicide resistant red rice and weedy rice. It is important to follow not only the label, but the whole weed control program which is an Integrated Pest Management program of herbicides, cultural practices and crop rotation.

FullPage Rice Cropping Solution Stewardship Practices:

The RiceTec FullPage rice cropping solution is only useful as long as it is used appropriately and as directed under the Stewardship Best Management Practices. Since cultivated rice and weedy rice are genetically similar and compatible, any rice trait technology has the opportunity to be transferred weedy to weedy rice in the event that weedy rice goes uncontrolled. Therefore, the following stewardship guidelines have been established to help you, the rice farmer, manage this technology so you have the opportunity to take advantage of its benefits for many years to come.

1. Practice sound rotation practices. Crop rotation is one of the most important things you can do to mitigate the development of herbicide-resistant weeds on your farm. Crop rotation provides the opportunity to use different tillage and herbicide modes of action, which can slow the development of resistance. Do not plant FullPage Rice in consecutive years in the same field.

2. Start early. Research shows that weed competition during the first 1 to 3 weeks of the growing season can have a negative impact on yield. We recommend a preemergence, or delayed preemergence, application of a residual herbicide, such as clomazone, pendimethalin or quinclorac, to slow any weed growth during the critical early stages of growth.

3. Make a minimum two applications of FullPage rice cropping solution herbicides prior to 2-tiller stage. Research has shown that two applications is more effective than a single application at high rates for grass and weedy rice control. Two applications maximize coverage of the weeds and optimizes the longevity of the technology. The first application should take place before planting, at planting or up to 3 weeks after emergence. The second application should follow approximately 14days later for optimum control. We recommend IMAZETHAPYR 240 SL be utilized for the first application and IMAZETHAPYR 240 SL or POSTSCRIPT be used for the second application. If a third, or salvage application is needed, apply POSTSCRIPT prior to the panicle initiation (1/2" internode elongation) stage of growth. Applications of IMAZETHAPYR 240 SL or POSTSCRIPT beyond the panicle initiation stage of growth may lead to yield loss.

4. 100% control is the goal. In order to maintain its value and the value of other herbicide tolerance technologies, your goal should always be 100% control of weedy rice to avoid loss of the technology on your farm. Therefore, every effort should be made to keep weedy rice from flowering and going to seed in your field. Make plans to rogue any weedy rice escapes prior to flowering.

5. Mix things up. Many herbicides in rice are classified as ALS inhibitors. These include herbicides such as halosulfuron, penoxsulam, bispyribac, imazethapyr and POSTSCRIPT. Therefore, we recommend

including other herbicides with different modes of action in the tank in order to avoid the development of weed resistance. Herbicides like quinclorac, propanil, bentazon and carfentrazone are herbicides with different modes of action that can prolong the development of weed resistance when tank mixed with IMAZETHAPYR 240 SL or POSTSCRIPT. Clomazone, quinclorac, and pendimethalin should also be considered in the overall weed control program to provide alternative modes of action.

6. Moisture is the key. In order for most herbicides to be effective, plants need to be actively growing. Dry conditions reduce the effectiveness of all herbicides. Therefore, make sure that weeds are actively growing at the time of application, and in the case of IMAZETHAPYR 240 SL herbicide, plan applications prior to a flush or rainfall for proper incorporation into the soil and optimal residual activity. The IMAZETHAPYR 240 SL label calls for a 0.5" rainfall or flushing within 2 days of application.

7. IMAZETHAPYR 240 SL herbicide has both foliar and residual soil activity, which requires activation through soil moisture. Therefore, if your field conditions dictate a flush or rainfall is pending, apply IMAZETHAPYR 240 SL prior to receiving moisture. POSTSCRIPT is a foliar herbicide, which does not require soil activation; however, performance is maximized under moist or flooded conditions. Do not apply either herbicide to drought-stressed plants.

8. Do not save seed. The FullPage rice cropping solution hybrids are protected by several patents or patents pending and saving of seed for anything other than grain is prohibited. Saved seed will not have tolerance to IMAZETHAPYR 240 SL and POSTSCRIPT.

#### **ROTATIONAL CROPS**

#### RESTRICTIONS

- When greater than 8 total fl oz/A of IMAZETHAPYR 240 SL is used, soybeans are the only rotational crop that may be planted the following year.
- When rates equal to or less than 8 total fl oz/A per year, the following crops may be planted after the waiting period prescribed in the table.

Сгор	Months between second application and replanting
Alfalfa	4*
Barley	9.5*
Cotton	18
Edible beans and peas	4*
Field corn	8.5*
Flax	26
Grain Sorghum	18
Lettuce	18
Lima beans	May be replanted immediately
Oats	18
Peanuts	May be replanted immediately
Popcorn	18

Potatoes	26
FullPage Rice (not less than 75% hybrid seed)	May be replanted immediately
Rice (Non-FullPage rice cropping solution)	18
Rye	4*
Safflower	18
Seed corn	8.5*
Southern peas	May be replanted immediately
Soybeans	May be replanted immediately
Sunflower	18
Sweet corn	18
Tobacco	9.5
Wheat	4*
Crops not listed	40**

\*If the total use rate is greater than 8 fl oz/A, the rotational interval is one full year.

\*\*A successful and representative field bioassay must also be completed for any crop not specifically listed. The bioassay must thoroughly cover any soil variation in the field including high and low spots and any variations in pH.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store above 32°F in original containers only. If product freezes, return to room temperature and agitate to reconstitute. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

#### CONTAINER HANDLING:

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank 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 incineration, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Refillable Container:** Refillable container. Refill this container with Imazethapyr 2 SL. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions 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**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ADAMA makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ADAMA is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ADAMA disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ADAMA's election, the replacement of product.

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Optional Text for Import Labels: [Shipped for further labeling and packaging/ NOT INTENDED FOR USE BY CONSUMER]

IMAZETHAPYR 240 SL (66222-248): SAL 12-05-17; AMEND 12-13-17