



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

August 18, 2020

Mary Beth Endres  
Registration Manager  
Liberty Crop Protection, LLC  
1880 Fall River Drive, Suite 100  
Loveland, Colorado 80538

Subject: Registration Review Label Mitigation for Imazethapyr  
Product Name: Liberty Imazethapyr  
EPA Registration Number: 89168-73  
Application Dates: January 21, 2020  
Decision Numbers: 559004

Dear Ms. Endres:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Imazethapyr Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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EPA Reg. No. 89168-73  
Decision No. 559004

If you have any questions about this letter, please contact Marisa Wright by phone at (703) 347-0463, or via email at [wright.marisa@epa.gov](mailto:wright.marisa@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Linda Arrington', with a stylized flourish at the end.

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure

# LIBERTY IMAZETHAPYR

IMAZETHAPYR GROUP 2 HERBICIDE

**HERBICIDE  
FOR USE ON ALFALFA, BEANS AND PEAS, CLOVER, PEANUT, AND SOYBEAN**

<b>ACTIVE INGREDIENT:</b>	<b>% BY WT.</b>
Ammonium Salt of Imazethapyr: (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid*	22.87%
<b>OTHER INGREDIENTS:</b>	77.13%
<b>TOTAL:</b>	100.00%

\* Equivalent to 21.6% (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid  
1 gallon contains 2.0 pounds of active ingredient as the free acid.

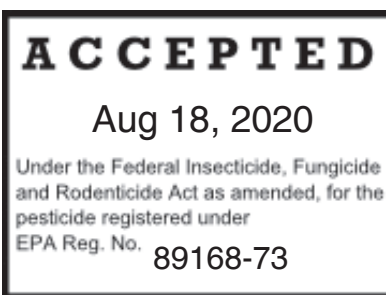
## KEEP OUT OF REACH OF CHILDREN CAUTION / PRECAUCIÓN

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

**For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300**

**SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.**

**Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.**



**EPA Reg. No.: 89168-73**

**EPA Est. No.:** \_\_\_\_\_

**NET CONTENTS: \_\_\_\_\_ GAL (\_\_\_\_ L)**

**Manufactured for:**  
LIBERTY CROP PROTECTION, LLC  
1880 Fall River Drive, Suite 100  
Loveland, CO 80538

012120

<b>FIRST AID</b>	
<b>IF ON SKIN:</b>	<ul style="list-style-type: none"> <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>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, and 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>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <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>
<b>HOTLINE NUMBER</b>	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at <b>1-800-858-7378</b> or your poison control center at <b>1-800-222-1222</b>. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC <b>800-424-9300</b>.</p>	

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. 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 barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber (includes natural rubber blends and laminates) ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils
- Shoes plus socks

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

<b>USER SAFETY RECOMMENDATIONS</b>
<p><b>Users should:</b></p> <ul style="list-style-type: none"> <li>• Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.</li> <li>• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li> <li>• 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.</li> </ul>

**ENVIRONMENTAL HAZARDS**

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

**Groundwater Advisory**

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

### **Surface Water Advisory**

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water.

This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of Imazethapyr from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

### **Non-Target Organism Advisory**

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

### **Mixing and Loading Instructions**

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates. Check-valves or anti-siphoning devices must be used on all mixing and/or irrigation equipment.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sinkholes, 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 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.

### **DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. This label must be in the possession of the user at the time of pesticide application.

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.

Observe all cautions and limitations on this label and on the labels of products used in combination with this product. Do not use this product other than in accordance with the instructions set forth on this label. The use of this product not consistent with this label may result in injury to crops. Keep containers closed to avoid spills and contamination.

### **AGRICULTURAL USE REQUIREMENTS**

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

exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 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  $\geq$  14 mils, or nitrile rubber  $\geq$  14 mils
- Shoes plus socks

### PRODUCT INFORMATION

LIBERTY IMAZETHAPYR is a soluble liquid herbicide to control and suppress many broadleaf and grass weeds and sedges, as listed in this label.

LIBERTY IMAZETHAPYR kills weeds by root and/or foliage uptake and rapid translocation to growing points. Adequate soil moisture is important for optimum LIBERTY IMAZETHAPYR activity. When adequate soil moisture is present, this product provides residual control of susceptible germinating weeds; activity on established weeds depends on weed species and location of its root system in the soil.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur after LIBERTY IMAZETHAPYR application. These effects occur infrequently and are temporary. Normal growth and appearance should resume within 1 to 2 weeks.

When organophosphate (such as chlorpyrifos insecticide) or carbamate insecticides are tank mixed with this product, temporary injury may result to the treated crops.

Use of LIBERTY IMAZETHAPYR 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 use of this product and, therefore, rotational crop injury is always possible. Under some conditions (such as heavy texture soil, high organic matter, low pH, or low rainfall), this product may cause injury to subsequent planted crops. Vegetable crops and particularly sugar beets are sensitive to LIBERTY IMAZETHAPYR residue in the soil.

### Replanting

If replanting is necessary in a field previously treated with LIBERTY IMAZETHAPYR, the field may be replanted to any labeled crop for this product. Rework the soil no deeper than the treated zone. Do not apply a second treatment of this product.

### Restrictions

- Not for Sale, Sale into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.
- Do not apply this product through any type of irrigation system.

### RESISTANCE MANAGEMENT

Imazethapyr, the active ingredient in this product, is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to this product 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.

### Weed Management

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

- Rotate the use of this product or other Group 2 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in the field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact LIBERTY CROP PROTECTION, LLC at [855-466-8428 or 844-425-8488 or other appropriate telephone number].

### **Management of Resistant Biotypes**

Since the occurrence of resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to these Mode of Actions have been found in your region. Do not assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

### **Integrated Pest (Weed) Management**

This product may be integrated into an overall weed pest management strategy whenever the use of an herbicide is required. Practices known to reduce weed development (tillage, crop competition) and herbicide use (weed scouting, proper application timing, banding) should be followed wherever possible. Consult local agricultural and weed authorities for additional IPM strategies established for your area.

## MIXING INSTRUCTIONS

Postemergence applications of LIBERTY IMAZETHAPYR require the addition of an adjuvant AND a nitrogen fertilizer solution.

### Restriction

- Fertilizer solutions may not be used in California.

### Adjuvants

**Crop Oil Concentrate (COC).** Petroleum-based or vegetable seed-based oil concentrate may be used. Methylated seed oil (MSO) is recommended when weeds are under moisture or temperature stress. Use methylated seed oil at 1.0% volume/volume (v/v) (1 gallon per 100 gallons of spray solution), or use crop oil concentrate at 1.25% v/v (1.25 gallons per 100 gallons of spray solution).

### Adjuvant Restriction

- Do not include COC when applying this product to edible legume vegetable crops.

## OR

**Surfactant.** Use nonionic surfactant (NIS) containing at least 80% active ingredient. Apply surfactant at 0.25% v/v (1 quart per 100 gallons of spray solution). An organosilicone surfactant or dry surfactant may be used in place of NIS.

## AND (all states except California)

**Fertilizer Solution.** Recommended nitrogen-based fertilizers including liquid fertilizers (such as 28%N, 32%N, or 10-34-0) may be applied at 1.25 to 2.5 gallons per 100 gallons of spray solution. Use the higher rate when weeds are under moisture or temperature stress. Instead of liquid fertilizer, spray grade ammonium sulfate (AMS) may be used at 12 to 15 pounds per 100 gallons of spray solution.

**Note:** Fertilizer solution is not required in LIBERTY IMAZETHAPYR applications in use areas south of Interstate Highway 40, except in the states of New Mexico, Oklahoma, and Texas.

### Tank Mix Instructions

When this product is used in combination with another herbicide, 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.

When applying LIBERTY IMAZETHAPYR as the only herbicide:

1. Fill spray tank 1/2 full with clean water.
2. Use a calibrated device to measure the required amount of LIBERTY IMAZETHAPYR. While agitating, add LIBERTY IMAZETHAPYR to the spray tank.
3. Add adjuvants.
4. Fill remainder of spray tank with water.

If other herbicides or other spray tank components are tank mixed with LIBERTY IMAZETHAPYR, while agitating, add components in the following order and thoroughly mix after adding each component.

1. Fill spray tank 1/2 full with clean water.
2. Add soluble packet products and thoroughly mix.
3. Add WP (wetttable powder), DG (dispersible granule), DF (dry flowable), or liquid flowable formulations not in soluble packets.
4. Add LIBERTY IMAZETHAPYR and thoroughly mix.
5. Add other aqueous solution products.
6. Add EC (emulsifiable concentrate) products.
7. Add surfactant or crop oil to the spray tank.
8. Add liquid fertilizer.



9. While agitating, fill the remainder of the tank with water.

### **Cleaning Spray Equipment**

To avoid injury to sensitive crops, spray equipment used for LIBERTY IMAZETHAPYR applications must be drained and thoroughly cleaned with water before being used to apply other products.

### **SPRAYING INSTRUCTIONS**

Do not apply when wind velocity is greater than 10 mph, or when spray may be carried to sensitive crops. LIBERTY IMAZETHAPYR 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, or nontarget crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

### **Ground Application**

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. A spray pressure of 20 to 40 PSI is recommended.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying LIBERTY IMAZETHAPYR to minimum tillage or no-till crops. Use higher gallonage for fields with dense vegetation or heavy crop residue. Adjust the boom height to ensure proper coverage of weed foliage (according to manufacturer's recommendation). Use only flat-fan nozzle tips for postemergence applications. Avoid overlaps when spraying.

### **Aerial Application**

LIBERTY IMAZETHAPYR may be applied by air to crops listed in this label unless otherwise noted.

Uniformly apply with properly calibrated aerial equipment in 5 or more gallons of water per acre. When applied postemergence, the addition of NIS **and** fertilizer solution are required for optimum weed control. Apply NIS at 1 quart per 100 gallons of spray solution **or** COC at 1.25 gallons per 100 gallons of spray solution **and** a liquid fertilizer at 1.25 gallons per 100 gallons of spray solution. See **Postemergence in Application Information** section.

### **SPRAY DRIFT**

#### **Aerial Applications**

- Do not release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

#### **Ground Boom Applications**

- User must only apply with the release height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

#### **Boomless Ground Applications**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

### **SPRAY DRIFT ADVISORIES**

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

#### **IMPORTANCE OF DROPLET SIZE**

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

#### **Controlling Droplet Size – Ground Boom**

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

#### **Controlling Droplet Size – Aircraft**

- **Adjust Nozzles** - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **Boom-less Ground Applications**

- Setting nozzles at the lowest effective height will help to reduce the potential for spray

#### **Handheld Technology Applications**

- Take precautions to minimize spray drift.

#### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift.

#### **SHIELDED SPRAYERS**

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

#### **TEMPERATURE AND HUMIDITY**

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

#### **TEMPERATURE INVERSIONS**

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

#### **WIND**

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

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

### **APPLICATION INFORMATION**

LIBERTY IMAZETHAPYR may be applied as a preplant, preplant incorporated, preemergence, or postemergence spray. Refer to **Use-Specific Information** for application instructions, restrictions and precautions.

### **Preplant Incorporated**

Apply LIBERTY IMAZETHAPYR following land preparation and thoroughly incorporate to a depth of 1 to 2 inches. If crops are planted on beds, apply and incorporate after bed formation using PTO-driven equipment or a rolling cultivator. Maintain this product in the surface 1 to 2 inches of the finished beds. Application may be made up to 45 days before planting soybeans.

When LIBERTY IMAZETHAPYR is soil applied to control nutsedge in peanuts, incorporate with two passes of the incorporation implement. Make the second pass at an offset angle to the first pass to minimize potential for streaking.

### **Preemergence (Surface)**

Use LIBERTY IMAZETHAPYR in all production tillage systems. It can be applied before planting (up to 45 days before planting); at planting in conventional, minimum tillage, or no-till production systems; or after planting and before crop emergence.

### **No-till or Minimum Tillage**

Apply LIBERTY IMAZETHAPYR treatments before, during, or after planting. To ensure thorough coverage, use a minimum of 20 gallons of water per acre. Use higher gallonage for fields with dense vegetation or heavy crop residue.

For maximum grass control, tank mix LIBERTY IMAZETHAPYR with dimethenamid/dimethenamid-p, pendimethalin or pyroxasulfone. To kill existing vegetation, glyphosate or 2,4-D (early preplant; see 2,4-D label for limitations) may be tank mixed with this product alone or in combination with dimethenamid/dimethenamid-p, pendimethalin or pyroxasulfone. Remove glyphosate or 2,4-D from the tank mixture if vegetation is absent at the time of application. 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.

**Note:** Adjust planters to ensure adequate soil coverage of seed.

### **Soil Application**

LIBERTY IMAZETHAPYR provides effective weed control in conservation tillage systems designed to meet conservation compliance requirements. This product can be applied as an early preplant, preplant incorporated, or preemergence treatment in soybeans. It can also be applied in conventional, minimum tillage, and no-till production systems. The application method of choice depends on the anticipated weed spectrum and preference of the applicator.

Adequate soil moisture is required for optimum activity. Rainfall or overhead irrigation is necessary to move LIBERTY IMAZETHAPYR into the weed germination zone. The amount of rainfall or irrigation required following application depends on existing soil moisture, soil texture, and organic matter content. Sufficient water to moisten soil to a depth of 2 inches is normally adequate. If adequate moisture is not received within 7 days after treatment, cultivation is recommended to control escaped weeds. When adequate moisture is received after dry conditions, this product provides residual control of susceptible germinating weeds; activity on established weeds depends on weed species and location of its root system in the soil.

LIBERTY IMAZETHAPYR controls weeds by uptake by weed roots and translocation to the growing points where it stops weed growth. Susceptible weeds may emerge; growth will stop; and weeds will die or are not competitive with the crop.

### **Soil Application with Liquid Fertilizer**

LIBERTY IMAZETHAPYR can be applied to the soil in liquid fertilizers, alone, or in combination with dimethenamid/dimethenamid-p, or pendimethalin to soybeans. Mixtures including trifluralin may be applied to soybean only. Follow all LIBERTY IMAZETHAPYR label directions about incorporations, timing of application, special instructions, and precautions. Apply treatments in 20 or more gallons of liquid fertilizer

per acre with ground equipment. Always test the compatibility of this product with the liquid fertilizer before mixing in the spray tank.

### **Postemergence**

LIBERTY IMAZETHAPYR is effective in controlling weeds in conservation tillage as well as in conventional production systems. Apply this product as an early postemergence treatment when crops and weeds are actively growing and before weeds are more than 3-inches tall, unless otherwise indicated. Delay application until the majority of weeds are at the specified growth stage. Base application timing on weed size and not crop growth stage.

An adjuvant (crop oil concentrate or surfactant) and nitrogen-based fertilizer must be added to the spray solution for optimum weed control activity. See **Adjuvants** section in **Mixing Instructions** for specific instructions.

When this product is applied postemergence, absorption will occur through both roots and foliage. Susceptible weeds stop growing and die or are not competitive with the crop.

LIBERTY IMAZETHAPYR not only controls many existing broadleaf and grass weeds when applied postemergence, it also controls susceptible weeds that may emerge after application.

Unusually cool temperatures (50°F or less) reduce photosynthesis and transpiration and thus reduce uptake, translocation, and efficacy of LIBERTY IMAZETHAPYR in weeds. Delaying a LIBERTY IMAZETHAPYR application for 48 hours from the time temperature increases above 50°F, if air temperature has been below 50°F for 10 or more hours, will improve weed control and reduce crop response.

For maximum weed control, cultivate 7 to 10 days after a postemergence LIBERTY IMAZETHAPYR application. This timely cultivation will enhance residual weed control, especially under dry conditions.

Apply LIBERTY IMAZETHAPYR a minimum of 1 hour before rainfall or over-head irrigation.

### **No-till or Minimum Tillage and Double Crop Soybeans**

LIBERTY IMAZETHAPYR controls existing weeds and provides residual control of most weeds when applied early postemergence in no-till or minimum tillage soybean and double crop soybean production systems. Apply before or after emergence of the crop. Refer to postemergence application information in **Weeds Controlled (Soybean)** table for weeds controlled and specified weed size.

If LIBERTY IMAZETHAPYR is applied before emergence of the crop, and weeds exceed the specified size, add a contact herbicide to LIBERTY IMAZETHAPYR to enhance control. See instructions for **No-till or Minimum Tillage** in the **Preemergence (Surface)** section of this label.

## **CROP USE DIRECTIONS**

### **ALFALFA AND CLOVER**

#### **Application Instructions**

Apply LIBERTY IMAZETHAPYR postemergence only at 3 to 6 fluid ounces (0.047 to 0.094 lb ae) per acre to seedling or established alfalfa or clover grown for forage, hay, or seed.

- **Seedling Alfalfa or Clover.** LIBERTY IMAZETHAPYR must be applied postemergence to seedling alfalfa or clover. Apply this product when seedling alfalfa or clover is in the second trifoliate stage or larger and when the majority of weeds are 1 to 3 inches. When applied to alfalfa or clover grown for seed, apply this product before bud formation. For low-growing weeds (such as mustard), apply this product before the rosette exceeds 3 inches.
- **Established Alfalfa or Clover.** LIBERTY IMAZETHAPYR can be applied to established alfalfa or clover in the fall, in the spring to dormant or semi-dormant alfalfa or clover (less than 3 inches of

regrowth), or between cuttings. Make any application before significant alfalfa or clover growth or regrowth (3 inches) to allow this product to reach target weeds.

LIBERTY IMAZETHAPYR is effective in controlling a broad spectrum of broadleaf and grass weeds. Alfalfa and clover are tolerant to postemergence applications of this product after the second trifoliate leaf has expanded. Minor height reduction or slight leaf yellowing may occur soon after application.

Apply LIBERTY IMAZETHAPYR as an early postemergence treatment when weeds are actively growing. Weeds are generally easier to control before they exceed 3 inches in height. Weeds under stress are less susceptible to control in cold or drought stress conditions.

### **Stand Establishment**

Apply LIBERTY IMAZETHAPYR after the alfalfa or clover has 2 fully expanded trifoliate leaves. Weeds must not exceed the size listed in the **Weeds Controlled (Alfalfa and Clover)** tables. This product may be applied to summer-seeded, fall-seeded, or spring-seeded alfalfa or clover.

### **Inter-seeded Oats**

Oats inter-seeded with alfalfa or clover will reduce soil erosion and allow alfalfa or clover to establish. Oats, however, can compete with alfalfa or clover. An application of LIBERTY IMAZETHAPYR will kill or significantly reduce the growth of oats and allow alfalfa or clover to establish with minimal erosion or competition from oats. Apply this product to oats when oats have 3 to 4 leaves.

### **Dormant Established Alfalfa or Clover**

LIBERTY IMAZETHAPYR may be applied to dormant alfalfa or clover in the fall following the last cutting. This product may also be applied in the spring to dormant alfalfa or clover or as alfalfa or clover breaks dormancy. Apply spring treatments before excessive alfalfa or clover growth (less than 3 inches) to reduce spray interference.

### **Growing Established Alfalfa or Clover**

For weed control during the season, apply LIBERTY IMAZETHAPYR following alfalfa or clover cutting. Remove hay from the field and apply this product before excessive alfalfa or clover regrowth.

### **Perennial Grass Suppression**

If perennial grass (such as orchardgrass, fescue, brome, or timothy) is present in an alfalfa or clover stand, LIBERTY IMAZETHAPYR will reduce the growth and competitive effect of the grass.

### **Precautions**

- When this product is applied to seedling alfalfa or clover, there may be a temporary reduction in growth.
- If applied to alfalfa or clover under cool conditions (40°F or less), temporary stunting and yellowing of the crop may occur.

### **Restrictions**

- A maximum of 6 fluid ounces (0.094 lb ae) per acre may be applied per year to alfalfa or clover.
- Do not apply this product at more than 4 fluid ounces (0.063 lb ae) per acre in North Dakota or Minnesota north of Highway #210.
- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre of this product to alfalfa or clover during the last year of the stand.
- Do not feed, graze, or harvest alfalfa or clover for 30 days following an application of this product to alfalfa or clover.
- **Replanting:** If replanting is necessary in a field previously treated with this product, do not plant alfalfa or clover for 4 months after application of this product. Refer to **Rotational Crop Restrictions** section for plant-back interval of various crops.

## Weeds Controlled

When applied as directed, LIBERTY IMAZETHAPYR will control or reduce competition from the following weeds. Refer to **Mixing Instructions** section for additive directions when weeds are at the maximum specified growth stage or are under stress.

**Note:** R = Reduced Competition

Weeds noted with an “R” will be suppressed by LIBERTY IMAZETHAPYR. For best results, apply before weeds exceed size indicated in the following tables.

### BROADLEAF WEEDS CONTROLLED

Weeds Controlled	LIBERTY IMAZETHAPYR RATE PER ACRE		
	3 fl oz (0.047 lb ae)	4 fl oz (0.063 lb ae)	6 fl oz (0.094 lb ae)
	Maximum Weed Size (Inches)		
Artichoke, Jerusalem	R	6	8
Bedstraw, catchweed	-	3	4
Beet, wild	4	5	6
Buckwheat, wild	-	3	4
Chickweed,			
common	R	3	4
mouseear	R	3	3
Cocklebur, common	R	8	8
Cress, hoary	-	R	R
Dandelion	-	R	R(5)
Dock,			
broadleaf (seedling)	-	-	R(6)
curly (seedling)	-	-	R(6)
Dodder	-	-	R*
Fiddleneck	-	-	R(4)
Filaree,			
redstem	-	R	3
whitestem	-	R	3
Fleabane, rough	-	3	3
Flixweed	R	3	4
Goosefoot, nettleleaf	R	3	4
Grounsel, common	-	-	R(3)
Henbit	-	R	3
Jimsonweed	-	3	4
Knotweed, prostrate	-	R	3
Kochia (non-ALS resistant)	R	3	3
Lambsquarters, common (1 to 2 leaves)	-	R	R(2)
Lettuce, miner's	-	3	4
Mallow			
common	-	3	3
little	-	3	3
Marshelder	-	4	6
Morningglory,			
entireleaf	-	R	3
ivyleaf	-	R	3
pitted	-	R	3
smallflower	R	3	4
tall	-	R	3
Mustard			

Weeds Controlled	LIBERTY IMAZETHAPYR RATE PER ACRE		
	3 fl oz (0.047 lb ae)	4 fl oz (0.063 lb ae)	6 fl oz (0.094 lb ae)
	Maximum Weed Size (Inches)		
black	3	3	4
tumble	3	3	4
wild	3	3	4
Nettle, burning	-	3	4
Nightshade			
black	3	3	4
Eastern black	3	3	4
hairy	3	3	4
Oxtongue, bristly	-	-	R(3)
Pennycress, field	3	3	4
Pepperweed,			
field	3	3	4
Virginia	R	3	3
Pigweed,			
redroot	4	6	8
smooth	4	6	8
spiny	-	6	8
Radish, wild	-	R	4
Ragweed,			
common	-	2	3
giant	-	3	3
Redmaids,	-	3	4
Rocket,			
London	3	4	6
yellow	R	3	4
Rockpurslane, desert	-	-	3
Shepherd's-purse	3	3	4
Smartweed,			
ladysthumb	R	3	4
Pennsylvania	R	3	4
swamp (seedling)	-	3	4
Spurge,			
petty	-	3	4
prostrate	-	R	3
spotted	-	R	3
Spurry, corn	-	3	3
Sunflower, common	R	4	6
Swinecress	-	3	3
Tansymustard,			
green	3	3	4
pinnate	3	3	4
Thistle, Russian	R	3	3
Velvetleaf	R	3	4
Wartcress, creeping	-	2	3
Watercress	-	3	3
Willoweed, panicle	-	3	3

\* For best results in suppressing dodder (*Cuscuta* spp.), apply this product with COC or MSO after dodder has emerged but before or soon after attachment.

### GRASSES AND SEDGES CONTROLLED

<b>Weeds Controlled*</b>	<b>LIBERTY IMAZETHAPYR RATE PER ACRE</b>	
	<b>4 fl oz (0.063 lb ae)</b>	<b>6 fl oz (0.094 lb ae)</b>
	<b>Maximum Weed Size (Inches)</b>	
Barnyardgrass	R	3
Bluegrass, annual	-	R(3)
Canarygrass, littleseed	R	R(3)
Cereals, volunteer		
barley	R	R(4)
oat	R	R(4)
wheat	R	R(4)
Crabgrass,		
large	R	3
smooth	R	3
Cupgrass, woolly**	3	3
Foxtail,		
giant	6	6
green	3	4
yellow	3	3
Johnsongrass,		
rhizome	R	R(6 to 12)
seedling	8	8
Millet, wild proso	R	3
Nutsedge,		
purple	R	R(6)
yellow	R	R(6)
Oat, wild	R	R(4)
Quackgrass***	-	R(7)
Rice, red	3	4
Shattercane	8	10
Signalgrass, broadleaf	R	8
<p>* This product is active against many grass species. However, when heavy grass pressure is anticipated, use this product in a sequential application with a registered postemergence grass herbicide such as sethoxydim for optimum control.</p> <p>** This product controls emerged woolly cupgrass only.</p> <p>*** Quackgrass will be suppressed only when actively growing and before it exceeds 7 inches in height.</p>		

#### **Tank Mix Herbicides**

To control weeds not listed on this label, LIBERTY IMAZETHAPYR may be tank mixed with other approved herbicides. 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.

#### **CONSERVATION RESERVE PROGRAM (CRP) AND AGRICULTURAL RESERVE PROGRAM LAND SEEDED TO FORAGE LEGUME COVER CROPS**

LIBERTY IMAZETHAPYR is effective in controlling many annual broadleaf and grass weeds in Conservation Reserve Program (CRP) and Agricultural Reserve Program (set-aside) land seeded to forage legume cover crops: alfalfa, birdsfoot trefoil, clover, crown vetch, kudzu, lespedeza, lupin, milk vetch, sainfoin, trefoil, velvet bean, and vetch.

**Note:** Cover crops may also be planted into fields previously treated with LIBERTY IMAZETHAPYR for weed control in soybeans. In this case, do not apply this product to the cover crop until the following spring.



LIBERTY IMAZETHAPYR application may result in temporary reduction in growth of legumes. Plants overcome temporary effects and become well established because of reduced weed competition.

LIBERTY IMAZETHAPYR may be applied postemergence at 4 fluid ounces (0.063 lb ae) per acre to seedling legumes (with at least 3 fully expanded trifoliolate leaves) or to established legumes. On established legumes, this product may be applied in the fall or spring before weeds exceed the maximum specified size for control.

Refer to Soybean section in **Use-specific Information** for weeds controlled.

### Restrictions

- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre per application.
- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre per year.
- Do not make more than one application of this product per year.

**ADZUKI, BLACK TURTLE, CHICKPEA (GARBANZO BEAN), CRANBERRY, DRY EDIBLE PEAS, ENGLISH PEA, GREAT NORTHERN, LENTIL, LIMA, NAVY, PINTO, RED KIDNEY, SMALL WHITE-TYPE DRY BEANS, SOUTHERN PEA, AND WHITE LUPIN**

**For use in states East of and including: Colorado, New Mexico, North Dakota, South Dakota, and Wyoming (except states east of and including: Connecticut, Massachusetts, and Vermont). Refer to the following map for geographical use area.**



### Crop Precautions

- Reduced crop growth, quality, and yield, and/or delayed maturity may result from an application of this product to edible legume vegetables. Because crop maturity may be delayed, timing of harvest may need to be adjusted accordingly.
- Apply this product only if proper agronomic practices have been used, including good soil fertility, proper crop rotation, disease and insect management, and tillage practices that eliminate compaction and hardpans. Plant lentils, lima beans, or peas at least 1/2-inch deep to reduce risk of crop injury.
- Some varieties may be more sensitive to applications of this product. Verify with the seed supplier the crop tolerance of the variety to be planted.

### Crop Restrictions

- **In Michigan or the Delaware, Maryland, and Virginia (DelMarVa) Peninsula:** Do not apply more than 2 fluid ounces (0.031 lb ae) per acre per application to sand or loamy sand soils.

- **In North Dakota or north of Highway #210 in Minnesota:** Do not apply more than 2 fluid ounces (0.031 lb ae) per acre per application.
- Do not apply more than 3 fluid ounces (0.047 lb ae) per acre per year to listed edible legumes (except southern pea) in this geographical area.
- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre per year to southern pea only in this geographical area.
- Do not make more than one application of this product per year.
- **Preharvest Interval:** 30 days for English pea, snap bean, southern pea and succulent lima bean and chickpea (Arizona and California only).
- **Preharvest Interval:** 60 days for chickpea, dry edible peas, lentil, red kidney bean and other dry bean and pea types listed on this label.
- Do not apply this product through any type of irrigation system.
- Do not apply this product postemergence to chickpea, lentil, lima bean, or white lupin.
- Do not apply this product if planting is delayed and chance of frost before maturity is likely.
- Do not apply this product if cold and/or wet conditions are present or predicted to occur within one week of application.
- Do not apply this product postemergence before crop has at least one trifoliolate leaf or peas are at least three inches in height or crop injury (reduced crop growth and/or delayed maturity) may result.
- Do not apply this product postemergence after crop has begun to flower or crop injury may result. Refer to specific legume vegetable crop for specific application timings.
- For post emergence application, use only nonionic surfactants as a spray additive. Do not use crop oils, methylated seed oils, or petroleum oils.

**ADZUKI, BLACK TURTLE, CRANBERRY, DRY EDIBLE PEAS, ENGLISH PEA, GREAT NORTHERN, NAVY, PINTO, RED KIDNEY, SMALL WHITE-TYPE DRY BEANS, AND SOUTHERN PEA**

**Application Instructions**

**Preplant Incorporated**

Apply LIBERTY IMAZETHAPYR at up to 3 fluid ounces (0.047 lb ae) per acre to dry beans (adzuki, black turtle, cranberry, great northern, navy, pinto, red kidney, and small white-type dry beans), dry edible peas, and English pea, or up to 4 fluid ounces (0.063 lb ae) per acre for southern pea only, within 1 week before planting. Applied preplant incorporated, this product may be tank mixed with a registered grass herbicide. 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.

**Preemergence**

Apply LIBERTY IMAZETHAPYR at up to 3 fluid ounces (0.047 lb ae) per acre to dry beans, dry edible peas, and English pea, or up to 4 fluid ounces (0.063 lb ae) per acre for southern pea only, immediately after, or up to 3 days after planting. This product may be applied in a tank mix with a registered grass herbicide or applied preemergence following a preplant incorporated application of a registered grass herbicide. 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.

**Early Postemergence**

Apply LIBERTY IMAZETHAPYR at up to 3 fluid ounces (0.047 lb ae) per acre to dry beans, dry edible peas, and English pea, or up to 4 fluid ounces (0.063 lb ae) per acre for southern pea only. Apply to dry beans with at least one fully expanded trifoliolate leaf. Apply to dry edible peas, English pea, and southern pea at least 3 inches in height but before 5 nodes and before flowering. Use of trifluralin before application of this product may increase the likelihood and severity of crop injury. Nonionic surfactant must be added to the spray solution. Nonionic surfactant must contain at least 80% active ingredient and be used at 2 pints per 100 gallons of spray mixture.

### Tank Mix Herbicides

LIBERTY IMAZETHAPYR may be tanked mixed with labeled rates of bentazon to control weeds not listed on this label. Addition of bentazon may also cause antagonism, thereby reducing control of grass weeds. Nitrogen-based fertilizer may be included as a spray additive ONLY when this product is tank mixed with bentazon. Refer to the bentazon label for proper application rates and restrictions. 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.

### CHICKPEA (GARBANZO), LENTIL, LIMA BEAN, AND WHITE LUPIN

#### Application Instructions

##### Preplant Incorporated

Apply LIBERTY IMAZETHAPYR at up to 3 fluid ounces (0.047 lb ae) per acre within 1 week before planting. Applied preplant incorporated, this product may be tank mixed with a registered grass herbicide. 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.

##### Preemergence

Apply LIBERTY IMAZETHAPYR at up to 3 fluid ounces (0.047 lb ae) per acre immediately after or up to 3 days after planting. This product may be applied in a tank mix with a registered grass herbicide or applied preemergence following a preplant incorporated application of a registered grass herbicide. 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 this product to white lupins grown on sand or loamy sand soils.
- **In Michigan or the Delaware, Maryland, and Virginia (DelMarVa) Peninsula:** Do not apply more than 2 fluid ounces (0.031 lb ae) per acre per application to sand or loamy sand soils.
- **In North Dakota or north of Highway #210 in Minnesota:** Do not apply more than 2 fluid ounces (0.031 lb ai) per acre per application.
- Do not apply more than 3 fluid ounces (0.047 lb ae) per acre per year.
- Do not make more than one application of this product per year.
- Do not apply this product postemergence to chickpea, lentil, lima bean or white lupin.

##### WEEDS CONTROLLED

LIBERTY IMAZETHAPYR applied at 2 fluid ounces (0.031 lb ae) per acre preplant incorporated, preemergence, or early postemergence will control:

Mustard, wild	Nightshade, black*	Nightshade, Eastern black*
* Suppression only		

LIBERTY IMAZETHAPYR herbicide applied at 3 fluid ounces (0.047 lb ae) per acre preplant incorporated, preemergence, or early postemergence will control:

Mustard, wild	Nightshade, Eastern black	Pigweed, redroot
Nightshade, black	Nightshade, hairy	

Postemergence applications of 3 fluid ounces (0.047 lb ae) per acre must be made to weeds less than 2-inches tall for best results.

When applied as directed at 4 fluid ounces (0.063 lb ae) per acre in southern peas ONLY, LIBERTY IMAZETHAPYR will control or reduce competition from weeds in the following table.

The **Maximum Leaf Stage** column indicates the maximum number of leaves to spray weeds postemergence. Do not count cotyledon leaves when determining weed stage of growth.

When soil applied to grasses, more consistent control can be obtained from preplant incorporated treatments.

### WEEDS CONTROLLED

	Soil Applied	Postemergence	
		Maximum Leaf Stage	Size (Inches)
<b>BROADLEAF WEEDS</b>			
Anoda, spurred	C	2	1 – 2
Artichoke, Jerusalem	-	8	6 – 10
Bristly starbur	-	2	1 – 2
Buffalobur	C*	-	-
Carpetweed	C	-	-
Cocklebur, common	C*	8	1 – 8
Galinsoga	C	-	-
Jimsonweed	C**	4	1 – 3
Kochia (non-ALS resistant)	C	4	1 – 3
Lambsquarters, common	C**	R	1 – 2
Mallow, Venice	R	-	-
Morningglory			
entireleaf	R	2	1 – 2
ivyleaf	R	2	1 – 2
pitted	R	2	1 – 2
smallflower	C	4	1 – 3
tall	R	2	1 – 2
Mustard spp.	C	4	1 – 3
Nightshade,			
black	C	4	1 – 3
Eastern black	C	4	1 – 3
hairy	C	4	1 - 3
Pigweed,			
redroot	C	4	1 – 4
smooth	C	4	1 – 4
spiny	C	4	1 – 4
Poinsettia, wild	C	-	-
Puncturevine	C	-	-
Purslane, common	C	-	-
Pusley, Florida	C	-	-
Ragweed,			
common	R	4	1 – 3
giant	R	4	1 - 3
Sage, barnyard	-	R	1 – 3
Sida, prickly	C**	-	-
Smartweed,			
ladysthumb	C	4	1 – 3
Pennsylvania	C	4	1 - 3
Spurge,			
prostrate	C	4	1 – 3
spotted	C	4	1 - 3
Sunflower, common	C**	4	1 – 3
Thistle, Canada	-	R	1 – 3

	Soil Applied	Postemergence	
		Maximum Leaf Stage	Size (Inches)
Velvetleaf	C**	4	1 – 3
<b>GRASS WEEDS AND SEDGES</b>			
Barnyardgrass	R	3	1 – 3
Crabgrass,			
large	R	3	1 – 3
smooth	R	3	1 – 3
Cupgrass, woolly	-	3†	1 – 3
Foxtail,			
giant	C	6	1 – 6
green	C	3	1 – 3
robust purple	C	3	1 – 3
robust white	C	3	1 – 3
yellow	C	3	1 – 3
Goosegrass	R	-	-
Johnsongrass,			
rhizome	-	R	1 – 8
seedling	C	6	1 - 8
Nutsedge,			
purple	R	R	1 – 3
yellow	R	R	-
Panicum,			
fall	R	-	-
Texas	R	-	-
Red rice	-	3	1 – 3
Shattercane	R	6	1 – 8
Signalgrass, broadleaf	R	4	1 - 8
C = Control, R = Reduced Competition			
* Use soil applications for light-to-moderate infestations only. Must be preplant incorporated for best results.			
** When soil applied, common Jimsonweed, lambsquarters, prickly sida, velvetleaf and common sunflower are more consistently controlled by preplant incorporated treatments.			
† This product controls emerged woolly cupgrass only.			

## **CHICKPEA, DRY EDIBLE PEAS, LENTIL, LIMA BEAN, AND SUCCULENT PEAS**

**For Use in Idaho, Montana, Nevada, Oregon, Utah, and Washington**

### **Application Instructions**

#### **Preplant for No-till and Minimum Tillage Systems Only**

Apply LIBERTY IMAZETHAPYR at 3 fluid ounces (0.047 lb ae) per acre within 30 days before planting. If incorporated, do not incorporate deeper than 3 inches.

In no-till and minimum tillage systems, LIBERTY IMAZETHAPYR may be applied in the fall before spring planting. Rainfall is required for incorporation and activation. Unpredictable weed control can be expected because factors such as length of time between application and planting as well as uncontrollable weather factors will determine herbicide activity and longevity. Apply this product in the fall when soil temperature at the 4-inch depth is less than 55°F and before the ground is frozen.

#### **Preplant Incorporated**

Apply LIBERTY IMAZETHAPYR at 3 fluid ounces (0.047 lb ae) per acre within 1 week before planting. Do not incorporate deeper than 3 inches.

**Preemergence**

Apply LIBERTY IMAZETHAPYR at 3 fluid ounces (0.047 lb ae) per acre after planting but before crop emergence.

**Postemergence (dry edible peas ONLY)**

Apply LIBERTY IMAZETHAPYR at 2 fluid ounces (0.031 lb ae) per acre. Nonionic surfactant must be added to the spray solution. Nonionic surfactant must contain at least 80% active ingredient and be used at 2 pints per 100 gallons of spray mixture. Do not apply this product postemergence before crop has at least one trifoliolate leaf, or peas are at least three inches in height, or crop injury (reduced crop growth and/or delayed maturity) may result.

Bentazon may be tank mixed with LIBERTY IMAZETHAPYR to control weeds not listed on this label. Addition of bentazon may also cause antagonism, thereby reducing control of grass weeds. Nitrogen-based fertilizer may be included as a spray additive ONLY when this product is tank mixed with bentazon. Use liquid fertilizer at 1.25 to 2.5 gallons per 100 gallons of spray solution or AMS at 12 to 15 pounds per 100 gallons of spray solution. 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 more than 3 fluid ounces (0.047 lb ae) per acre per year to peas and beans in this region.
- Do not make more than one application of this product per year.
- Do not apply this product postemergence to chickpea, lentil, or lima bean.
- **Preharvest Interval:** 30 days for succulent lima bean and succulent peas.
- **Preharvest Interval:** 60 days for chickpea, dry edible peas, dry lima bean, and lentil.

**Weeds Controlled**

LIBERTY IMAZETHAPYR applied postemergence at 2 fluid ounces (0.031 lb ae) per acre will control\*:

Wild mustard	Eastern black nightshade*
Black nightshade*	Hairy nightshade*
* Suppression only	

LIBERTY IMAZETHAPYR applied at 3 fluid ounces (0.047 lb ae) per acre will control:

Weeds Controlled	Preplant Incorporated	Preemergence
Buckwheat, wild	C	C
Kochia (non-ALS resistant)	C	C
Lambsquarters, common	C	-
Mustard, wild	C	C
Nightshade,		
black	C	C
Eastern black	C	C
hairy	C	C
Pigweed, redroot	C	C
Shepherd's-purse	C	C
Thistle, Russian	C	C
C = Control		

**CHICKPEA****For Use in Arizona and California Only****Application Instructions****Preplant Incorporated**

Apply LIBERTY IMAZETHAPYR at up to 3 fluid ounces (0.047 lb ae) per acre within 1 week before planting. Applied preplant incorporated, this product may be tank mixed with a registered grass herbicide. 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.

**Preemergence**

Apply LIBERTY IMAZETHAPYR at up to 3 fluid ounces (0.047 lb ae) per acre immediately after or up to 3 days after planting. This product may be applied in a tank mix with a registered grass herbicide or applied preemergence following a preplant incorporated application of a registered grass herbicide. 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 more than 3 fluid ounces (0.047 lb ae) per acre per application to chickpeas in this region.
- Do not apply more than 3 fluid ounces (0.047 lb ae) per acre per year to chickpeas in this region.
- Do not make more than one application of this product per year.
- **Preharvest Interval:** 30 days for succulent chickpeas.
- **Preharvest Interval:** 60 days for dry chickpeas.

**WEEDS CONTROLLED**

Weeds Controlled	Preplant Incorporated	Preemergence
Buckwheat, wild	C	C
Kochia (non-ALS resistant)	C	C
Lambsquarters, common	C	-
Mustard, wild	C	C
Nightshade,		
black	C	C
Eastern black	C	C
hairy	C	C
Pigweed, redroot	C	C
Shepherd’s-purse	C	C
Thistle, Russian	C	C
C = Control		

**RED KIDNEY BEAN  
For Use in California Only**

**Application Instructions**

**Postemergence**

Apply LIBERTY IMAZETHAPRY at 3 fluid ounces (0.047 lb ae) per acre. Nonionic surfactant must be added to the spray solution. Nonionic surfactant must contain at least 80% active ingredient and be used at 2 pints per 100 gallons of spray mixture.

Apply LIBERTY IMAZETHAPYR when weeds are actively growing and red kidney beans have at least 1 fully expanded trifoliate leaf. Do not apply this product postemergence before crop has at least one true leaf or crop injury (reduced crop growth and/or delayed maturity) may result.

For maximum weed control, cultivate 7 to 10 days after a postemergence LIBERTY IMAZETHAPYR application to enhance residual weed control, especially under dry conditions.

**Restrictions**

- Do not apply this product postemergence when the crop and weeds have been subjected to stress conditions such as temperature or moisture extremes.
- Do not apply by aerial application.
- Do not apply more than 3 fluid ounces (0.047 lb ae) per acre per application to red kidney beans.

- Do not apply more than 3 fluid ounces (0.047 lb ae) per acre per year to red kidney beans.
- Do not make more than one application of this product per year.
- **Preharvest Interval:** 60 days

### Weeds Controlled

When applied as directed, LIBERTY IMAZETHAPYR will control or reduce competition from weeds in the following table. Refer to the **Mixing Instructions** section for directions of additives when weeds are at the maximum specified growth stage or are under stress.

**Maximum Leaf Stage** column indicates the maximum number of leaves to spray weeds postemergence.

Weeds Controlled	Postemergence	
	Maximum Leaf Stage	Size (Inches)
Kochia (non-ALS resistant)	4	1 – 3
Mustard, wild	4	1 – 3
Nightshade,		
black	4	1 – 3
Eastern black	4	1 – 3
hairy	4	1 – 2
Pigweed, redroot	4	1 – 3

## SNAP BEANS

**For Use in Alabama, Florida, Georgia, Illinois, Indiana, Iowa, Minnesota, Michigan, New Jersey, North Carolina, and Wisconsin**

### Application Instructions

#### Preplant Incorporated

Apply LIBERTY IMAZETHAPYR at 1.5 fluid ounces (0.023 lb ae) per acre within 1 week of planting. When applied as a preplant incorporated treatment, this product may be tank mixed with a registered grass herbicide. 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.

#### Preemergence

Apply LIBERTY IMAZETHAPYR at 1.5 fluid ounces (0.023 lb ae) per acre immediately after or up to 1 day after planting. This product may be applied in a tank mix with a registered grass herbicide or applied preemergence after a preplant incorporated application of a registered grass herbicide. 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 by aerial application.
- Do not apply this product after July 31 (June 20 in New Jersey).
- Do not apply more than 1.5 fluid ounces (0.023 lb ae) per acre per application to snap bean.
- Do not apply more than 1.5 fluid ounces (0.023 lb ae) per acre per year to snap bean.
- Do not make more than one application of this product per year.
- **Preharvest Interval:** 30 days

#### Weeds Suppressed

LIBERTY IMAZETHAPYR applied at 1.5 fluid ounces (0.023 lb ae) per acre preplant incorporated or preemergence will suppress or reduce competition of the following weeds:



Common purslane  
Eastern black nightshade

Redroot pigweed  
Wild mustard

### **SNAP BEANS**

**For Use in Arkansas, Missouri, New Mexico (counties of Curry and Roosevelt only),  
North Carolina, Oklahoma and Texas (counties of Bailey, Castro, Lamb and Parmer only)**

#### **Application Instructions**

##### **Postemergence**

Apply LIBERTY IMAZETHAPYR at 1.5 fluid ounces (0.023 lb ae) per acre in a tank mix combination with labeled rate of bentazon. Nonionic surfactant must be added to the spray solution. Nonionic surfactant must contain at least 80% active ingredient and be used at 2 pints per 100 gallons of spray 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**

- Do not apply by aerial application.
- Do not apply this product after July 31.
- Do not apply more than 1.5 fluid ounces (0.023 lb ae) per acre per application to snap bean.
- Do not apply more than 1.5 fluid ounces (0.023 lb ae) per acre per year to snap bean.
- Do not make more than one application of this product per year.
- **Preharvest Interval:** 30 days
- Do not apply this product postemergence before crop has at least one true leaf or crop injury (reduced crop growth and/or delayed maturity) may result.

##### **Weeds Suppressed**

LIBERTY IMAZETHAPYR applied at 1.5 fluid ounces (0.023 lb ae) per acre preplant incorporated or preemergence will suppress or reduce competition of the following weeds:

Eastern black nightshade

Redroot pigweed

### **PEANUTS**

#### **Application Instructions**

Apply LIBERTY IMAZETHAPYR at 4 fluid ounces (0.063 lb ae) per acre for all methods of application except sequential (see instructions following): preplant incorporated, preemergence, ground-cracking, and postemergence. At this rate, 1 gallon of this product will treat 32 acres of peanuts.

LIBERTY IMAZETHAPYR may also be applied in sequential application. Apply 2 fluid ounces (0.031 lb ae) per acre in a soil application (preplant incorporated or preemergence) followed by 2 fluid ounces (0.031 lb ae) per acre applied at ground crack or postemergence.

Chlorimuron ethyl may be applied postemergence to peanuts following a LIBERTY IMAZETHAPYR application. Refer to the chlorimuron ethyl label for specific directions.

##### **Restrictions**

- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre per application to peanuts.
- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre per year to peanuts.
- Do not make more than one application per year, except for sequential applications. For sequential application, do not make more than two applications per year.
- Do not graze or feed treated peanut forage, vines, hay, or straw to livestock.
- **Preharvest Interval:** 85 days
- **Replanting:** In the event of a crop loss because of weather, peanuts can be replanted. Do not work the soil deeper than 2 inches.
- In Arizona, for use only in Yuma and La Paz counties.
- Not for use in California.

## Weeds Controlled

When applied as directed, LIBERTY IMAZETHAPYR will control or reduce competition from the following listed weeds. Refer to **Mixing Instructions** section for directions of additives when weeds are at the maximum specified growth stage or are under stress.

**Maximum Leaf Stage** column indicates the maximum number of leaves to spray weeds postemergence. Do not count cotyledon leaves when determining weed stage of growth.

**At-crack Application** refers to the time when soil cracks because of the emerging peanut seedling, which usually occurs from 10 to 14 days after planting. At this time weeds have generally not germinated or are in the seedling stage. If weeds have more than 2 true leaves, refer to the **Postemergence** weed control column for weeds controlled.

In west Texas and New Mexico, wait until late cracking (most of the peanuts have emerged) before applying LIBERTY IMAZETHAPYR.

LIBERTY IMAZETHAPYR is active against many broadleaf and grass weeds. However, when heavy grass or common lambsquarters pressure is anticipated, use this product in combination with a registered soil-applied grass herbicide. 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.

When LIBERTY IMAZETHAPYR is soil applied to grasses, more consistent control can be obtained from preplant incorporated treatments.

When LIBERTY IMAZETHAPYR is soil applied for control of nutsedge in peanut, incorporate with two passes of the incorporation implement. Make the second pass at an offset angle to the first pass to minimize the potential for streaking.

## WEEDS CONTROLLED

Weeds Controlled	Soil Applied	At-Crack	Postemergence	
			Maximum Leaf Stage	Size (Inches)
<b>BROADLEAF WEEDS</b>				
Alligator weed	–	C	4	1 – 3
Anoda, spurred	C	C	2	1 – 2
Bristly starbur	–	–	2	1 – 2
Buffalobur	C*	C	R	1 – 3
Carpetweed	C	C	–	–
Cocklebur, common	R	C	8	1 – 8
Devil's claw	C	C	–	–
Galinsoga	C	C	–	–
Jimsonweed	C*	C	4	1 – 3
Lambsquarters, common	C*	C	R	1 – 2
Morningglory,				
entireleaf	R	C	2	1 – 2
ivyleaf	R	C	2	1 – 2
pitted	R	C	2	1 – 2
smallflower	C	C	4	1 – 3
tall	R	C	2	1 – 2
Mustard spp.	C	C	4	1 – 3
Nightshade,				
black	C	C	4	1 – 3
Eastern black	C	C	4	1 – 3

Weeds Controlled	Soil Applied	At-Crack	Postemergence	
			Maximum Leaf Stage	Size (Inches)
hairy	C	C	4	1 – 3
Pigweed,				
redroot	C	C	8	1 – 8
smooth	C	C	8	1 – 8
spiny	C	C	8	1 – 8
Poinsettia, wild	C	C	–	–
Puncturevine	C	C	–	–
Purslane, common	C	C	–	–
Pusley, Florida	C	C	–	–
Ragweed,				
common	R	R	4	1 – 3
giant	R	R	4	1 – 3
Sida, prickly (Teaweed)	C*	C	–	–
Smartweed,				
ladysthumb	C	C	4	1 – 3
Pennsylvania	C	C	4	1 – 3
Spurge,				
prostrate	C	C	4	1 – 3
spotted	C	C	4	1 – 3
toothed	C	C	–	–
Sunflower	C*	C	4	1 – 3
Velvetleaf	C*	C	4	1 – 3
<b>GRASS WEEDS AND SEDGES</b>				
Barnyardgrass	R	R	3	1 – 3
Crabgrass,				
large	R	C	3	1 – 3
smooth	R	C	3	1 – 3
Cupgrass, woolly	–	–	3	1 – 3
Foxtail,				
giant	C	C	6	1 – 6
green	C	C	3	1 – 3
yellow	C	C	3	1 – 3
Goosegrass	R	R	–	–
Johnsongrass,				
rhizome	–	–	R	6 – 12
seedling	C	C	6	1 – 8
Nutsedge,				
purple	C	C	3	1 – 3
yellow	C	C	3	1 – 3
Panicum,				
fall	R	–	–	–
Texas	R	–	–	–
Red rice	–	–	3	1 – 3
Shattercane	R	R	6	1 – 8
Signalgrass, broadleaf	R	C	4	1 – 6
C = Control, R = Reduced Competition				
* When this product is soil applied, these weeds are most consistently controlled by preplant incorporated treatments.				

### **Weeds Controlled by Sequential Applications of LIBERTY IMAZETHAPYR**

Sequential (split) application of LIBERTY IMAZETHAPYR is 2 fluid ounces (0.031 lb ae) per acre of product soil applied (preplant incorporated or preemergence) followed by 2 fluid ounces (0.031 lb ae) per acre applied at ground-crack or postemergence.

When applied as a sequential treatment, LIBERTY IMAZETHAPYR controls weeds listed in **Soil Applied** and **At-Crack** applications in the **Weeds Controlled (Peanut)** table and enhances control of purple and yellow nutsedge. Apply the second application before nutsedge exceeds 3 leaves.

### **Tank Mix Herbicides**

Control of additional grass and/or broadleaf weeds requires a tank mix or sequential use with another herbicide. LIBERTY IMAZETHAPYR may be tank mixed, or used in sequence with herbicides approved for use in peanuts (such as acetachlor, metolachlor or pendimethalin). 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.

## **SOYBEANS**

### **Application Instructions**

Apply LIBERTY IMAZETHAPYR before soybean bloom at 4 fluid ounces (0.063 lb ae) per acre for all methods of application: early preplant, preplant incorporated, preemergence, and postemergence (including minimum tillage and no-till). Application may be made up to 45 days before planting soybeans. See additional state-specific soybean application instructions section for **North Dakota and Minnesota (north of Highway #210)**.

If soybeans are furrow irrigated, till the soil before planting winter wheat or barley. Break up beds and mix soil with tillage equipment set to cut 4-inches to 6-inches deep.

### **Restrictions**

- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre per application to soybeans.
- Do not apply more than 4 fluid ounces (0.063 lb ae) per acre per year to soybeans.
- Do not make more than one application of this product per year.
- **Preharvest Interval:** 85 days
- Do not graze or feed treated soybean forage, hay, or straw to livestock.
- **Replanting:** In the event of a crop loss because of weather, soybeans can be replanted. Do not work the soil deeper than 2 inches.
- Do not tank mix this product with clomazone-containing herbicides. This product may be applied postemergence following a soil application of a clomazone-containing herbicide.
- Not for use in California.

### **Weeds Controlled**

When applied as directed, LIBERTY IMAZETHAPYR will control or reduce competition from weeds listed in the following table. Refer to the **Mixing Instructions** section for directions of additives when weeds are at the maximum specified growth stage or are under stress.

**Maximum Leaf Stage** column indicates the maximum number of leaves to spray weeds postemergence. Do not count cotyledon leaves when determining weed stage of growth.

Preplant incorporated treatments of LIBERTY IMAZETHAPYR are more consistent for grass control.

LIBERTY IMAZETHAPYR is active against many broadleaf and grass species. However, when heavy grass or common lambsquarters pressure is anticipated, use this product in combination with a registered soil-applied grass herbicide (such as acetachlor, metolachlor or pendimethalin) for optimum control. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank

mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Weeds Controlled	Soil Applied	Postemergence	
		Maximum Leaf Stage	Size (Inches)
<b>BROADLEAF WEEDS</b>			
Alligator weed	-	4	1 – 3
Anoda, spurred	C	2	1 – 2
Artichoke, Jerusalem	-	8	6 – 10
Bristly starbur	-	2	1 – 2
Buffalobur	C*	R	1 – 3
Carpetweed	C	-	-
Cocklebur, common	R	8	1 – 8
Galinsoga	C	-	-
Jimsonweed	C*	4	1 – 3
Kochia (non-ALS resistant)	C	4	1 – 3
Lambsquarters, common	C*	R	1 – 2
Mallow, Venice	R	-	-
Marshelder	C	4	1 – 3
Morningglory			
Entireleaf	R	2	1 – 2
ivyleaf	R	2	1 – 2
pitted	R	2	1 – 2
smallflower	C	4	1 – 3
tall	R	2	1 – 2
Mustard spp.	C	4	1 – 3
Nightshade,			
black	C	4	1 – 3
Eastern black	C	4	1 – 3
hairy	C	4	1 – 3
Pigweed,			
redroot	C	8	1 – 8
smooth	C	8	1 – 8
spiny	C	8	1 – 8
Poinsettia, wild	C	-	-
Puncturevine	C	-	-
Purslane, common	C	-	-
Pusley, Florida	C	-	-
Ragweed,			
common	R	R	1 – 3
giant	R	R	1 – 3
Sage, barnyard	R	1 – 3	-
Sida, prickly	C*	-	-
Smartweed,			
ladysthumb	C	4	1 – 3
Pennsylvania	C	4	1 – 3
Spurge,			
prostrate	C	4	1 – 3
spotted	C	4	1 – 3
Sunflower, common	C*	4	1 – 3
Thistle, Canada	-	R	1 – 3
Velvetleaf	C*	4	1 – 3
<b>GRASS WEEDS AND SEDGES</b>			

Weeds Controlled	Soil Applied	Postemergence	
		Maximum Leaf Stage	Size (Inches)
Branyardgrass	R	3	1 – 3
Crabgrass,			
large	R	3	1 – 3
smooth	R	3	1 – 3
Cupgrass, wooly**	-	3	1 – 3
Foxtail,			
giant	C	6	1 – 6
green	C	3	1 – 3
yellow	C	3	1 – 3
Goosegrass	R	-	-
Johnsongrass,			
rhizome	-	R	6 – 12
seedling	C	6	1 – 8
Millet, wild proso	R	R	1 – 3
Nutsedge,			
purple	R	R	1 – 3
yellow	R	R	1 – 3
Panicum,			
fall	R	-	-
Texas	R	-	-
Red rice	-	3	1 – 3
Shattercane	R	6	1 – 8
Signalgrass, broadleaf	R	4	1 – 8
Sorghum, alnum	R	6	1 – 3
C = Control, R = Reduced Competition			
* When this product is soil applied, these weeds are more consistently controlled by preplant incorporated treatments.			
** This product controls emerged woolly cupgrass only.			

### Tank Mix Herbicides

Control of additional grass and/or broadleaf weeds requires a tank mix or sequential use with another herbicide. LIBERTY IMAZETHAPYR may be tank mixed or used in sequence with herbicides approved for use in soybeans (such as acetachlor, metolachlor or pendimethalin). 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.

### Grass Weeds

A selective postemergence grass herbicide may be tank mixed with LIBERTY IMAZETHAPYR to control volunteer corn or grasses not controlled by this product. For best results, use crop oil concentrate AND liquid fertilizer with grass herbicide tank mixtures. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

### Tank Mix with Sethoxydim

Apply LIBERTY IMAZETHAPYR at 4 fluid ounces (0.063 lb ae) per acre. Refer to the sethoxydim label for the appropriate rate of sethoxydim for enhanced grass control and for additional weeds controlled, sizes, and rates. If a mixture of grass weeds is present, use the highest rate for the grass weeds present. The addition of sethoxydim to this product at labeled rates will control the following annual grass weeds. 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.

<b>ANNUAL GRASS WEEDS CONTROLLED</b>	<b>SIZE (Inches)</b>
Crabgrass, large	3 - 6
Crabgrass, smooth	
Goosegrass	
Barnyardgrass	3 - 8
Cupgrass, woolly	
Foxtail, giant	
Foxtail, green	
Foxtail, yellow	
Johnsongrass, seedling	
Junglerice	
Panicum, fall	
Panicum, Texas	
Signalgrass, broadleaf	
Sprangletop, red	
Witchgrass	3 - 12
Shattercane	
Corn, volunteer	4 - 10
Wild proso millet	

The addition of sethoxydim to LIBERTY IMAZETHAPYR enhances grass control, especially when heavy infestations of grass exist. It also provides control of grasses not controlled by this product. In some cases, the activity of sethoxydim may be reduced when mixed with LIBERTY IMAZETHAPYR. The reduction in activity may be overcome by delaying the application of sethoxydim 7 days following the application of this product. If sethoxydim is applied first, wait 3 days before applying LIBERTY IMAZETHAPYR.

For optimum control, apply the tank mixture to actively growing weeds at the sizes indicated in the preceding table. For sequential applications, refer to application rates and weeds sizes indicated in the LIBERTY IMAZETHAPYR and sethoxydim labels. 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.

### **Broadleaf Weeds**

Broadleaf herbicides that can be tank mixed with LIBERTY IMAZETHAPYR include acifluorfen, bentazon, bentazon + acifluorfen, cloransulam-methyl, fomesafen, or lactofen. Glyphosate may be tank mixed with this product to aid in control of certain weeds only in Roundup Ready® soybeans. Do not apply certain herbicides with LIBERTY IMAZETHAPYR; read all of the Soybean section for restrictions. 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 with Acifluorfen**

Addition of acifluorfen to LIBERTY IMAZETHAPYR at specified rates will enhance control of several broadleaf weeds. Refer to acifluorfen label for additional weeds controlled. 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.

When tank mixing acifluorfen with LIBERTY IMAZETHAPYR, apply this product at 4 fluid ounces (0.063 lb ae) per acre. Apply acifluorfen at the labeled rate, depending on weed size for:

Common Ragweed*	Waterhemp, tall
Pigweed spp.	Giant ragweed**
Waterhemp, common	

\* Use higher acifluorfen rate if common ragweed is present or the weed population is high.

\*\* Use the higher acifluorfen rate if giant ragweed is 6 to 8 inches tall.

#### **Acifluorfen Sequential Application Rates**

When applying acifluorfen following a LIBERTY IMAZETHAPYR application (sequential), apply acifluorfen at the labeled rate, depending on weed size for:

Common Ragweed*	Waterhemp, tall
Pigweed spp.	Giant ragweed**
Waterhemp, common	

\* Use higher acifluorfen rate if common ragweed is present or the weed population is high.

\*\* Use the higher acifluorfen rate if giant ragweed is 6 to 8 inches tall.

#### **Tank Mix with Cloransulam-methyl**

Cloransulam-methyl may be tank mixed with LIBERTY IZAMETHAPYR to aid in control of common and giant ragweed. Refer to the cloransulam-methyl product label for specified rates and precautions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### **Tank Mix with Sulfentrazone-containing Compounds**

LIBERTY IMAZETHAPYR provides control of many grass and broadleaf weeds when applied to the soil or applied postemergence to weeds. It also provides season-long control of many weeds. Sulfentrazone-containing products may be tank mixed with this product in soil applications for enhanced weed control in soybeans. 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.

LIBERTY IMAZETHAPYR may be applied postemergence to soybeans previously treated with sulfentrazone-containing products.

**Note:** Sulfentrazone-containing products are only labeled for soil applications to soybeans.

#### **Tank Mix with Thifensulfuron + Tribenuron Methyl**

For optimal weed control management of common lambsquarters, apply a soil-applied grass herbicide such as pendimethalin or trifluralin followed by LIBERTY IMAZETHAPYR postemergence. If common lambsquarters are not adequately controlled by the soil-applied treatment, thifensulfuron + tribenuron methyl may be tank mixed with this product for additional activity. 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.

Addition of thifensulfuron + tribenuron methyl to LIBERTY IMAZETHAPYR may cause severe injury and/or stunting to soybeans, especially when applied under hot, humid conditions. The USER ASSUMES ALL RISKS AND CONSEQUENCES associated with applications of this tank mix to soybeans.

When tank mixing thifensulfuron + tribenuron methyl with LIBERTY IMAZETHAPYR, use the following rates:



LIBERTY IMAZETHAPYR at 4 fluid ounces (0.063 lb ae) per acre AND labeled rate of thifensulfuron + tribenuron methyl.

Add to the spray mixture:

NIS at 1 quart per 100 gallons (0.25% v/v)

AND

Liquid nitrogen-based fertilizer (such as 28%N, 32%N, or 10-34-0) at 1.25 to 2.5 gallons per 100 gallons of spray solution. Instead of a liquid fertilizer, spray grade AMS may be used at 12 to 15 lbs per 100 gallons of spray solution.

Apply to 1 to 3 trifoliolate stage soybeans only.

**North Dakota and Minnesota (north of Highway #210)**

Apply LIBERTY IMAZETHAPYR postemergence only to soybean at 3 fluid ounces (0.047 lb ae) per acre in North Dakota and Minnesota (north of Highway #210).

WEEDS CONTROLLED	POSTEMERGENCE	
	MAXIMUM LEAF STAGE	SIZE (INCHES)
Cocklebur, common <sup>1</sup>	4	1 – 4
Kochia (non-ALS resistant)	4	1 – 3
Mustard spp.	4	1 – 3
Nightshade		
black	4	1 – 3
Eastern black	4	1 – 3
hairy	4	1 – 3
Pigweed, redroot	4	1 – 4
Wild oat <sup>2</sup>	3	1 - 4
1 For control of commoncocklebur, add acifluorfen at labeled rate to the spray solution.		
2 This product will reduce competition from wild oats.		

**ROTATIONAL CROP RESTRICTIONS**

The following rotational crops may be planted after applying LIBERTY IMAZETHAPYR at the specified rate for a labeled use. Planting earlier than the specified interval may result in crop injury.

**Note:** See **Exceptions to Rotational Crop Restrictions** following these guidelines.

**Rotational Interval following LIBERTY IMAZETHAPYR Application**

CROP(S) TO BE GROWN	PLANT-BACK INTERVAL (months)
Edamame, Lima bean, Peanut, Peas, Southern pea, Soybean	Anytime
Snap bean	2
Alfalfa, Birdsfoot Trefoil, Clover, Edible Beans (other than Lima Bean), Rye (except in North Dakota and Minnesota North of Highway #210), Wheat	4
Field corn, Field corn grown for seed	8.5
Barley (except in North Dakota), Tobacco	9.5
Barley (in North Dakota), Cotton, Lettuce, Oat, Popcorn, Rye (in North Dakota and Minnesota north of Highway #210), Safflower, Sorghum, Sunflower, Sweet corn	18
Flax, potato	26
All crops not listed elsewhere <b>Rotational Crop Restrictions*</b>	40

\* Following forty months after a LIBERTY IMAZETHAPYR application and before planting any crop not listed elsewhere in **Rotational Crop Restrictions**, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted across the previously

<b>CROP(S) TO BE GROWN</b>	<b>PLANT-BACK INTERVAL (months)</b>
<p>treated field and grown to maturity. The test strip should include low areas and knolls, and include variations in soil such as type and pH. If no crop injury is evident in the test strip, the intended rotational crop may be planted the following year.</p> <p>Sugar beet production can be reduced when grown in soil conditions with a pH less than 6.5. If the field is limed to adjust pH before planting rotational crops not listed in the <b>Rotational Crop Restrictions</b>, apply the lime at least 12 months before planting the rotational crop.</p>	

Use of LIBERTY IMAZETHAPYR 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.

### **Exceptions to Rotational Crop Restrictions**

#### **All Crops**

Full-rate application of products containing chlorimuron ethyl, chloransulam-methyl, flumetsulam, imazaquin or products containing imazethapyr the same year as LIBERTY IMAZETHAPYR may increase the risk of injury to sensitive follow crops. Consult labels for approved uses of these products in combinations.

Only rotational crops harvested at maturity may be used for feed or food.

#### **Barley**

- **North Dakota only** - Barley may be planted 18 months after LIBERTY IMAZETHAPYR application.
- **Delaware, Indiana, Kentucky, Maryland, New Jersey, Ohio, Pennsylvania, and Virginia only** - Barley may be planted 4 months after LIBERTY IMAZETHAPYR application.

#### **Certain Vegetable Crops**

**(Alabama, Delaware, Florida, Georgia, Indiana, Kentucky, Maryland, New Jersey, North Carolina, Pennsylvania, South Carolina, and Virginia only).**

The following crops may be planted 18 months following the last application of LIBERTY IMAZETHAPYR: Bahiagrass, cabbage, cantaloupe, cucumber, Irish potato, onion, sweet pepper transplants, sweet potato transplants, tomato transplants, and watermelon.

#### **Corn**

- **Field Corn and Field Corn Grown for Seed (Arizona, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming):** Field corn and field corn grown for seed may be planted nine and one-half months after LIBERTY IMAZETHAPYR application.
- **Sweet Corn and Popcorn Varieties (Illinois, Indiana, Iowa, Minnesota, Ohio, Tennessee, and Wisconsin only):** Sweet corn and popcorn varieties may be planted the year following an application of LIBERTY IMAZETHAPYR. Some sweet corn and popcorn varieties may be injured when planted at less than 18 months following an application of this product. Before planting sweet corn for processing, contact the processor company for information and recommendations regarding the tolerance of sweet corn varieties planned for fields treated with this product the previous year. Before planting popcorn, contact the popcorn company for information and recommendations regarding the tolerance of popcorn varieties planned for fields treated with LIBERTY IMAZETHAPYR the previous year.

#### **Precaution**

- Stunting and maturity delay or other adverse effects may result when sweet corn or popcorn are planted following use of this product.

#### **Restriction**

- Do not plant fresh market sweet corn varieties before 18 months after use of this product.

**Cotton**

- **Rotational Interval following LIBERTY IMAZETHAPYR Application to Alfalfa or Clover Grown for Seed**

<b>Irrigation and/or Precipitation Requirements</b>	<b>Rotation Interval (months)</b>
Less than 3 acre-feet (36 inches) of water	40
3 acre-feet (36 inches) of water or more	18

These guidelines do not apply to LIBERTY IMAZETHAPYR applications made to alfalfa or clover grown for hay or forage (use the 18-month rotational interval).

- **North Carolina, South Carolina, and Virginia only** - Cotton may be planted nine and one-half months after an application of LIBERTY IMAZETHAPYR if ALL of the following criteria are met:
  - This product is applied to peanuts only.
  - Soil texture is sandy loam or loamy sand only.
  - Greater than 16 inches of rainfall and/or irrigation is received following application of this product through October of the application year.

**Edible Legumes**

After LIBERTY IMAZETHAPYR is applied at no more than 3 fluid ounces (0.047 lb ae) per acre to edible legumes in the use areas described, the following rotational intervals apply:

- **Chickpea, lentil, peas** - plant anytime
- **Snap bean** - 3 months
- **Barley** - 4 months

**Snap Bean**

When applied at no more than 1.5 fluid ounces (0.023 lb ae) per acre to snap beans in the use areas defined on this label, snap beans may be replanted at any time after application of LIBERTY IMAZETHAPYR.

**Wheat**

In areas east of Interstate Highway I-35, wheat may be planted 3 months following LIBERTY IMAZETHAPYR application.

**Wheat in North Dakota**

<b>Rotational Interval Based on pH, Moisture and Tillage</b>		<b>Moldboard Plowing</b>	
		<b>No</b>	<b>Yes</b>
<b>pH and Rainfall Requirements</b>	>10 inches R+I AND pH >6.2	4 months	4 months
	<10 inches R+I OR pH <6.2	15 months	4 months

**R+I** = Rainfall and overhead irrigation from the time of LIBERTY IMAZETHAPYR application up until time of wheat planting. Does not include furrow or flood irrigation.

**Precautions**

- If the rainfall or pH requirements are not fully met, and wheat is planted before the specified rotation interval, injury may be reduced by tillage, such as deep disking (greater than 6-inches deep) after crop harvest but before November 1.
- The possibility of injury to wheat planted the next season increases if less than normal precipitation occurs within the first two months after application of this product.

## STORAGE AND DISPOSAL

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

### **Pesticide Storage**

Keep from freezing. Do not store below 32° F. Keep container closed when not in use. Do not store near seed, fertilizers or foodstuffs. Keep away from heat and flame. 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**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

### **Container Handling**

**NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS):** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS):** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 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. Offer for recycling, if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**REFILLABLE CONTAINER:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or 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. After triple rinsing is complete, and the container is not suitable for refilling or reconditioning, offer the container for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

## **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of LIBERTY CROP PROTECTION, LLC or Seller. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW all such risks shall be assumed by Buyer and User and Buyer and User agree to hold LIBERTY CROP PROTECTION LLC and Seller harmless for any claims relating to such factors.

LIBERTY CROP PROTECTION, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or LIBERTY CROP PROTECTION, LLC, and TO THE EXTENT CONSISTENT WITH APPLICABLE LAW Buyer and User assume the risk of any such use. To the extent

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