

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 Buzinapyr EPA Registration Number: 89168-37 Application Dates: January 21, 2020 Decision Numbers: 559000

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.

Page 2 of 2 EPA Reg. No. 89168-37 Decision No. 559000

If you have any questions about this letter, please contact Marisa Wright by phone at (703) 347-0463, or via email at <u>wright.marisa@epa.gov</u>.

Sincerely,

2 -2

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

Enclosure

METRIBUZIN	GROUP	5	HERBICIDE
IMAZETHAPYR	GROUP	2	HERBICIDE

LIBERTY BUZINAPYR

HERBICIDE FOR CONTROL OF CERTAIN GRASSES AND BROADLEAF WEEDS FOR USE IN SOYBEANS

ACTIVE INGREDIENTS: %	6 BY WT.
Metribuzin: 4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one	31.88%
Ammonium salt of imazethapyr: (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo	
-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid	6.49%
OTHER INGREDIENTS:	61.63%
TOTAL:	100.00%
Contains 3 lbs. of metribuzin and 0.5 lbs. of imazethapyr acid per gallon.	

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.



Aug 18, 2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 89168-37

EPA Reg. No.: 89168-37

EPA Est. No.: _____

NET CONTENTS: ____GAL (____L)

Manufactured for:

LIBERTY CROP PROTECTION, LLC 1880 Fall River Drive, Suite 100 Loveland, CO 80538

012120

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at **1-800-858-7378** or your poison control center at **1-800-222-1222**. For Chemical Spill, Leak, Fire or Exposure, call CHEMTREC **800-424-9300**.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

User Safety Requirements

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

Users should:

USER SAFETY RECOMMENDATIONS

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

ENVIRONMENTAL HAZARDS

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

Groundwater Advisory

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

Metribuzin is a chemical which can travel (seep or leach) through soil and can contaminate groundwater which may be used as drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Users are advised not to apply metribuzin where the water table is close to the surface, and where the soils are very permeable, i.e., well drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

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

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 equipment.

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

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. For PRODUCT USE Information contact your local Liberty representative.

DO NOT apply this product through any type of irrigation system.

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

Important: Failure to follow the directions for use restrictions and precautions on this label may result in poor weed control, crop injury, or illegal residues.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 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.

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, wear:

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

RESISTANCE MANAGEMENT

For resistance management, this product contains both a Group 2 (Imazethapyr) and Group 5 (Metribuzin) herbicide. Any weed population may contain plants naturally resistant to Group 2 and/or Group 5 herbicides. The resistant individual may dominate the weed population if these herbicides are used repeatedly in the same fields. 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 and Group 5 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 resistancemanagement 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 tankmixed 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.

Aerial Applications

SPRAY DRIFT

- 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.

PRODUCT INFORMATION

LIBERTY BUZINAPYR is a selective herbicide for the control or suppression of certain grass, broadleaf and sedge weeds in soybeans.

Activation: LIBERTY BUZINAPYR must be activated by a small amount of soil moisture following application. In areas of low rainfall, follow a preemergence application with light irrigation of 0.25 to 0.5 inch of water. Do not apply heavy irrigation immediately after application. As with many surface-applied herbicides, weed control and crop tolerance may vary with rainfall and/or soil texture.

<u>Crop Rotation</u>: See the Crop Rotation section of this label for specific instructions on crop rotation. Illegal residues and/or crop injury may result if crop rotation guidelines are not followed.

Replanting: If replanting is necessary in fields previously treated with LIBERTY BUZINAPYR, the field may be replanted to soybeans. DO NOT work the soil deeper than 2 inches. Before replanting, refer to the specific crop use sections for directions, precautions and restrictions about replanting.

Precautions

- 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 after crop has begun to flower or crop injury may result.

MIXING INSTRUCTIONS AND EQUIPMENT CLEANUP

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean the spray equipment before using LIBERTY BUZINAPYR. Follow the cleanup procedures specified on the labels of the previously applied products. Vigorous agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying operation. Do not allow the spray mixture to stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

Mixing LIBERTY BUZINAPYR in Water or In Liquid Fertilizers:

When mixing LIBERTY BUZINAPYR alone, add 1/3 of the required amount of water or fluid fertilizer to the spray or mixing tank and then, with the agitator running, add LIBERTY BUZINAPYR to the spray tank. Continue agitation while adding the remainder of the water or fluid fertilizer. Begin application of the spray solution after LIBERTY BUZINAPYR has completely dispersed in the water or fluid fertilizer. Maintain agitation until all of the mixture has been applied.

When mixing LIBERTY BUZINAPYR with tank mixtures, add 1/3 of the required amount of water or fluid fertilizer to the mix tank. Start the agitator running before adding any tank mix partners. Tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids such as LIBERTY BUZINAPYR, and emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

Important: When using LIBERTY BUZINAPYR in tank mixtures, all products in water-soluble packaging should be added to the tank and mixed with plain water before any other tank mix partner, including LIBERTY BUZINAPYR. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank. Water-soluble packets will not properly dissolve in most spray solutions that contain fluid fertilizers.

If using LIBERTY BUZINAPYR in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, restrictions, precautions, and limitations that appear on the tank mix product label. Do not exceed the labeled rates and follow the most restrictive directions for use, restrictions and precautions.

LIBERTY BUZINAPYR is compatible with most common tank mix partners. However, the physical compatibility with tank mix partners should be tested before use. To determine the physical compatibility of LIBERTY BUZINAPYR with other products, use a jar test, as described below.

LIBERTY BUZINAPYR Compatibility Testing: To ensure compatibility of LIBERTY BUZINAPYR with other pesticides, perform a jar test before tank mixing. The following test assumes a spray volume of 25 gallons per acre. For other spray volumes, make appropriate changes in the mixture.

Note: Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray for preplant surface, preplant incorporated, or preemergence applications only. Because liquid fertilizers vary,

even within the same analysis, **always check compatibility with pesticide(s) before use.** Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides.

Test Procedure:

- 1. Add 1.0 pint of carrier (fertilizer or water) to each of two one quart jars with tight lids. **Note:** Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.
- To one of the jars, add 1/4 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as Innvictis Envelop[™] (1/4 teaspoon is equivalent to 2.0 pints per 100 gallons spray). Shake or stir gently to mix.
- 3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
- 4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 to 30 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) Slurry the dry pesticide(s) in water before addition, or (b) add 1/2 the compatibility agent to the fertilizer or water and the other 1/2 to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
- 5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **Storage and Disposal** section of this label.

Equipment Cleanup After LIBERTY BUZINAPYR Application: After application of LIBERTY BUZINAPYR, equipment cleanup is very important. Because some crops are sensitive to low rates of LIBERTY BUZINAPYR, special attention must be given to cleaning equipment before spraying a crop other than those registered for use and on this label. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using the following procedure:

- 1. Flush tank, hoses, boom, and nozzles with clean water.
- 2. Prepare a cleaning solution of one gallon of household ammonia per 50 gallons of water. Many commercial spray tank cleaners may be used as well. Consult your Liberty representative for a partial listing of approved tank cleaners and more information about proper tank cleaning procedures. Do not use chlorine-based cleaners such as Clorox®.
- 3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly re-circulate the cleaning solution for **at least 15 minutes**. All visible deposits must be removed from the spraying system.
- 4. Flush hoses, spray lines, and nozzles for at least one minute with the cleaning solution.
- 5. Dispose of rinsate from steps 1 to 3 as described under the **Environmental Hazards** section of the **Precautionary Statements**.
- 6. Repeat steps 2 to 5.
- 7. Remove nozzles, screens, diaphragm check valves and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
- 8. Rinse the complete spraying system with clean water.

APPLICATION INSTRUCTIONS

LIBERTY BUZINAPYR may be applied by ground application. As discussed below, use a minimum of 10 gallons per acre of spray mixture for ground application.

Prepare no more spray mixture than is needed for the immediate operation. Clean spray equipment is very important so be sure to thoroughly clean before mixing LIBERTY BUZINAPYR. Vigorous agitation is necessary to maintain uniformity of the spray mixture. Maintain maximum agitation throughout the spraying

operation. Do not allow spray mixture to stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

Ground Application: Apply LIBERTY BUZINAPYR alone or in tank mixtures by ground spray equipment in a minimum of 10 gallons spray mixture per acre, unless otherwise specified. Use sprayers that provide accurate and uniform application. Calibrate sprayers often. If LIBERTY BUZINAPYR is applied in combination with wettable powder or dry flowable formulations, use screens and strainers with a minimum 50-mesh size.

Restriction

• Applications using a low pressure, high volume hand-wand is prohibited.

If LIBERTY BUZINAPYR is applied in a band, calculate the amount of herbicide needed for band treatment by the formula below:

Band width in inches	V	broadcast rate per sere		amount of LIBERTY BUZINAPYR
Row width in inches	X	broadcast rate per acre	=	needed per acre of field

Aerial Application: Do not make aerial applications of this product.

Application By Impregnated Dry Bulk Granular Fertilizers: LIBERTY BUZINAPYR may be impregnated or coated on many dry bulk granular fertilizers and applied with the fertilizers to control weeds. When applying LIBERTY BUZINAPYR with dry bulk fertilizers, follow all directions for use, restrictions and precautions on the LIBERTY BUZINAPYR label regarding target crops, rates per acre, soil texture, application methods, and rotational crops. Do not use on powder limestone.

It is the responsibility of the individual and/or company selling the herbicide/fertilizer mixture to comply with all individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application.

Prepare the herbicide/fertilizer mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray LIBERTY BUZINAPYR onto the fertilizer must be spaced to provide uniform spray coverage. Take care to aim the spray onto the fertilizer only, avoiding the walls of the blender.

If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb® FG or Celatom MP-79®, or similar granular clay or diatomaceous earth materials, to obtain a dry, free-flowing mixture. Absorptive materials should be added only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results will be obtained by using a granule of 6/30 particle size or of a size similar to that of the fertilizer materials being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

Calculate the amount of L	IBER	RTY BUZINAPYR to be used per ton	of fertili	zer by using the following formula:
2000		Number of ourses of LIPERTV		Ounces of LIBERTY
pounds of dry fertilizer	Х	RUZINARYP required per acro	=	BUZINAPYR per ton of dry
desired per acre		BOZINAF IN Tequiled per acte		fertilizer

Application by Pneumatic (Compressed Air) Equipment: High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix LIBERTY BUZINAPYR with Aromatic 200 at a rate of 2.0 to 2.5 pints per gallon of LIBERTY BUZINAPYR. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

Precautions

- Mixtures of this product and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications.
- When impregnating this product in a blender before application, a drier mixture can be obtained by substituting a drying agent for Aromatic 200. Use of Agsorb FG or another drying agent of 6/30 particle size.
- Drying agents are not recommended for use with On-The-Go impregnation equipment.

Restrictions

- To avoid potential for explosion,
 - Do not impregnate this product on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers.
 - Do not combine this product with a single superphosphate (1-20-0) or treble superphosphate (0-46-0).
 - Do not use this product on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application of Impregnated Dry Bulk Granular Fertilizer: In a single application use from 200 pounds, up to a maximum of 450 pounds, of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential in order to prevent possible crop injury to subsequent rotational crops. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil is recommended to obtain satisfactory weed control. On fine- or medium-textured soils in areas where soil incorporation is not planned, i.e., reduced-tillage situations or in some conventional till situations, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On coarse-textured soils, make applications approximately 14 days prior to planting. To help avoid rotational crop injury, make applications as early as possible, since LIBERTY BUZINAPYR impregnated onto dry bulk fertilizers can be expected to last longer in the soil than LIBERTY BUZINAPYR applied as a spray in water or fluid fertilizer.

TANK MIX COMBINATIONS WITH OTHER HERBICIDES

When LIBERTY BUZINAPYR is used in combination with another herbicide, to control weeds not listed on the LIBERTY BUZINAPYR label, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions, and precautions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

DIRECTIONS FOR USE

SOYBEANS (except California)

Only make one application of LIBERTY BUZINAPYR per year. LIBERTY BUZINAPYR can be applied preplant incorporated, preemergence surface. Additionally, this product can be applied as a postemergence directed spray (including minimum and no-till).

Use Rates:

Apply up to 14.2 fluid ounces (0.33 lb ai metribuzin and 0.055 lb ae imazethapyr) of LIBERTY BUZINAPYR per acre to soybeans.

North Dakota and Minnesota (north of highway #210) Rate: Only apply POSTEMERGENCE. Apply up to 13.0 fluid ounces (0.30 lb ai metribuzin and 0.05 lb ae imazethapyr) of LIBERTY BUZINAPYR per acre to soybeans.

Precautions: Injury to soybeans may occur when LIBERTY BUZINAPYR is used under the following conditions:

- When soils have a calcareous surface area or a pH of 7.5 or higher.
- Due to the sensitivity of certain soybean varieties, this product is not recommended for use on Altona, AP 55, AP 71, Asgrow 6520, Burlison, Coker 102, Coker 156, Dassel, GL 3202, Govan, Maple Amber,

NB 3665, NKS 1884, Paloma 350, Portage, Regal, Semmes, Terra-Vig 505, Terra-Vig 606, Tracy, Vansoy, and Vinton 81. Consult your Liberty Representative or your seed supplier for information on the tolerance to Metribuzin of newly released soybean varieties, prior to use of this product.

- When applied in conjunction with soil-applied organic phosphate pesticides.
- Over application or boom overlapping may result in stand loss and soil residues.
- Uneven application or improper incorporation can decrease the level of weed control and/or increase the level of injury.
- When applied to any soil with less than 1/2% organic matter.
- Soil incorporation deeper than recommended.
- When sprayers are not calibrated accurately.
- When heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.
- When soybeans are planted less than 1.5 inches deep, particularly in preemergence application.

Use Restrictions for Soybeans:

- Not for use in California.
- **DO NOT** apply to sand soils, or to sandy loam or loamy sand soils containing less than 2% organic matter.
- Preharvest Interval (PHI): 90 days.
- DO NOT graze or feed treated soybean forage, hay or straw to livestock.
- DO NOT make more than 1 application of this product to soybeans per year.
- **DO NOT** tank mix this product with clomazone-containing herbicides.
- Maximum application rate (all states except ND and MN north of Hwy #210) is 14.2 fluid ounces (0.33 lb ai metribuzin and 0.055 lb ae imazethapyr) per acre per year.
- Maximum application rate for ND and MN north of Hwy #210 is 13.0 fluid ounces (0.30 lb ai metribuzin and 0.05 lb ae imazethapyr) per acre per year.

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 make a second application of this product after replanting.

WEEDS CONTROLLED

When applied as directed, **LIBERTY BUZINAPYR** will control or reduce competition from the weeds listed in the following table. Refer to the **MIXING INSTRUCTIONS** section for recommendations of additives when weeds are at the maximum recommended growth stage or are under stress.

The **Maximum Leaf Stage** column indicates the **maximum** number of leaves to spray germinated weeds. **DO NOT** count cotyledon leaves when determining weed stage of growth.

NOTE: C = Control; R = Reduced Competition

WEED				
	SOIL APPLIED	MAXIMUM LEAF STAGE	MAXIMUM WEED SIZE (INCHES)	
Broadleaf				
Alligator weed	-	4	1-3	
Anoda, spurred	C	2	1-2	
Artichoke, Jerusalem	-	8	6-10	
Buffalobur	C*	-	1-3	
Bristlt starbur	-	2	1-2	
Carpetweed	С	-	-	
Cocklebur, common	R	8	1-8	
Galinsoga	С	-	-	
Jimsonweed	C*	4	1-3	
Kochia (non-ALS resistant)	С	4	1-3	
Lambsquarters, common	С	-	1-2	
Mallow, Venice	R	-	-	
Marshelder	С	4	1-3	

WEED				
	SOIL APPLIED	MAXIMUM LEAF STAGE	MAXIMUM WEED SIZE (INCHES)	
Morninglory,			· · · ·	
Entireleaf, ivyleaf, pitted, tall	R	2	1-2	
smallflower	С	4	1-3	
Mustard, sp.	С	4	1-3	
Nightshade,				
Black, Eastern black, hairy	С	4	1-3	
Pigweed,				
Redroot, Smooth, spiny	С	8	1-8	
Poinsettia, wild	С	-	-	
Puncturevine	С	-	-	
Purslane, common	С	-	-	
Pusley, Florida	С	-	-	
Ragweed,				
Common, giant	R	-	1-3	
Sage, barnyard	R	1-3	-	
Sida, prickly	C*	-	-	
Smartweed,				
Ladysthumb, Pennsylvania	С	4	1-3	
Spurge,				
Prostrate, spotted	С	4	1-3	
Sunflower, common	C*	4	1-3	
Thistle, Canada	-	-	1-3	
Velvetleaf	C*	4	1-3	

* When this product is soil applied, these weeds are more consistently controlled by preplant incorporated treatments.

ROTATIONAL CROP RESTRICTIONS

Сгор	Crop Rotation Intervals (Months)	Сгор	Crop Rotation Intervals (Months)
Alfalfa	4.5	Peas	8
Asparagus	40	Popcorn ^E	18
Bahiagrass ^F	40	Potatoes ^F	26
Barley, Spring (except ND) ^B	9.5	Rice	40
Barley, Winter (except ND) ^B	9.5	Root crops	40
Cabbage ^F	40	Rye	18
Canola ^G	40	Safflower	18
Cantaloupe ^F	40	Sainfoin	40
CLEARFIELD® Corn	8	Sorghum	18
Clover	18	Southern peas	8
Cotton ^H	18	Sweet pepper transplants ^F	40
Cucumber ^F	40	Sweet potato transplants ^F	40
Edible beans	12	Soybeans	0
Field corn ^{C,D}	8.5	Sunflower	18
Field corn (seed) ^{C,D}	8.5	Sugarcane	40
Flax	26	Sweet corn ^E	18
Forage grasses	40	Tobacco	18
Lentils	40	Tomatoes	40
Lettuce	18	Tomato transplants ^F	40
Lima	18	Watermelon ^F	40
Oats	18	Wheat, Spring	8
Onion ^F	40	Wheat, Winter ^A	8

Сгор	Crop Rotation Intervals (Months)	Сгор	Crop Rotation Intervals (Months)
Peanuts	18	Other crops not listed ^I	40

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

- A If soybeans are furrow irrigated, till the soil prior to planting winter wheat. Break up the beds and mix the soil with tillage equipment set to cut 4 to 6 inches deep.
- **B** Delaware, Indiana, Kentucky, Maryland, New Jersey, Ohio, Pennsylvania, and Virginia only: Barley may be planted 4 months following a LIBERTY BUZINAPYR application in these states. North Dakota only: Barley may be planted 18 months following a LIBERTY BUZINAPYR application.
- **C** Corn inbred lines: Corn inbred seed lines may be planted the year following an application of LIBERTY BUZINAPYR. Several seed companies have tested a wide range of inbreds for sensitivity to LIBERTY BUZINAPYR soil residues and have reported good crop safety. However, due to the proprietary nature of seed production, Liberty Crop Protection, LLC has not been given access to the inbred data. Growers are directed to contact the seed company for information and directions regarding the planting of corn grown for seed in fields treated with this product the previous year. Since growing conditions, environmental conditions and grower practices are beyond the control of Liberty Crop Protection, LLC all risks and consequences associated with planting seed corn inbreds into fields treated previously with this product shall be assumed by the user.
- **D** Arizona, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming only: Field corn and field corn grown for seed may be planted 9-1/2 months after LIBERTY BUZINAPYR application.
- **E** Illinois, Indiana, Iowa, Minnesota, Ohio, Tennessee, and Wisconsin only: Sweet corn and popcorn varieties may be planted the year following an application of LIBERTY BUZINAPYR. 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 directions regarding the tolerance of sweet corn varieties planned for fields treated with this product the previous year. DO NOT plant fresh market sweet corn varieties prior to 18 months after Liberty Buzinapyr use. Before planting popcorn, contact the popcorn company for information and directions regarding the tolerance of popcorn, contact the popcorn company for information and directions regarding the tolerance of popcorn varieties planned for fields treated with this product the previous year. Since growing conditions, environmental conditions and grower practices are beyond the control of Liberty Crop Protection, LLC, to the extent consistent with applicable law, all risks and consequences associated with planting sweet corn or popcorn varieties into fields treated previously with this product shall be assumed by the user. Stunting and maturity delay or other adverse effects may result when sweet corn or popcorn are planted following LIBERTY BUZINAPYR use.
- **F** Alabama, Delaware, Florida, Georgia, Indiana, Kentucky, Maryland, New Jersey, North Carolina, **Pennsylvania, South Carolina, and Virginia only:** This crop may be planted 18 months following the last application of LIBERTY BUZINAPYR.
- **G CLEARFIELD® Canola:** CLEARFIELD varieties of canola may be planted as a rotational crop the 12 months after an application of LIBERTY BUZINAPYR at specified rates on soybeans.
- H Cotton Rotation following applications to alfalfa or clover:
 -40 month rotation interval if field has received less than 36[±] inches water irrigation/precipitation
 -18 month rotation interval if field has received 36[±] inches or more water irrigation/precipitation
- I Field Bioassay Requirements: Following 40 months after application and before planting any crop not listed elsewhere in the rotational crops, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted across the previously 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.

STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed, or seed by storage or disposal.

PESTICIDE STORAGE: Store in a cool dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage.

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

Container Handling:

NONREFILLABLE CONTAINER (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 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 (all sizes): Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures allowed by state and local authorities.

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.

IN CASE OF EMERGENCY, CALL CHEMTREC: 1-800-424-9300.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of 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 Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LIBERTY CROP PROTECTION, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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