



## OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

January 15, 2026

Karen Murphy  
Regulatory Manager – Liberty Crop Protection  
1880 Fall River Drive Suite 100  
Loveland CO, 80538

Subject: Label Amendment - Registration Review Mitigation for Bifenthrin  
Product Name: LIBERTY BIFEN-IMID .5-.25  
EPA Registration Number: 89168-34  
Case Number: 478370  
Application Dates: March 29, 2021

Dear Karen Murphy:

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 Bifenthrin 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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may

distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Antoine Gremaud by phone at 919-541-5067, or via email at [Gremaud.antoine@epa.gov](mailto:Gremaud.antoine@epa.gov).

Sincerely,



Kevin Costello, Branch Chief  
Risk Management and Implementation Branch 2  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

ENCLOSURE: Stamped label

**RESTRICTED USE PESTICIDE**

Due to toxicity to fish and aquatic organisms. For retail sale to and use only by certified applicators, or persons under their direct supervision and only for those uses covered by the certified applicators certification.

Bifenthrin	GROUP	3A	INSECTICIDE
Imidacloprid	GROUP	4A	INSECTICIDE

# **LIBERTY BIFEN-IMID .5-.25**

**ACTIVE INGREDIENTS:**

By Wt.

Bifenthrin: (2-methyl[1,1'-biphenyl]-3-yl) methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropanecarboxylate*	5.70%
Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine .....	2.90%
OTHER INGREDIENTS* .....	<u>91.40%</u>
TOTAL .....	100.00%
CIS isomers 97% minimum, trans isomers 3% maximum.	
*Contains petroleum distillates	

This product contains ½ lb. of Bifenthrin and ¼ lb. of Imidacloprid active ingredient per gallon.

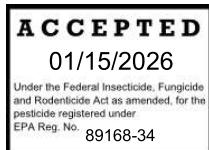
**KEEP OUT OF REACH OF CHILDREN**  
**DANGER**      **PELIGRO**

This label must be in the possession of the user at the time of application. Si usted no entiende la etiqueta, huse a alguien para que se a explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)  
See other panels for additional precautionary information.

**EPA Reg. No. 89168-34**

**EPA Est. No.**

**Net Contents:**



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

**111717RD011426**

## FIRST AID

<b>If Swallowed:</b>	<ul style="list-style-type: none"><li>• Immediately call a poison control center or doctor for treatment advice.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give any liquid to the person.</li><li>• Do not give anything by mouth to an unconscious person.</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>If on Skin or Clothing:</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, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

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.

**Note to physician:** This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Contains petroleum distillate - vomiting may cause aspiration pneumonia.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER** - Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin or swallowed. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). 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
- Protective eyewear
- Chemical-resistant gloves made of barrier laminate or viton  $\geq$  14 mils.
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## USER SAFETY RECOMMENDATIONS

### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

## 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.

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, made of barrier laminate or viton  $\geq$  14 mils.
- Shoes plus socks.

## ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county, contact the local extension service for procedures and precautions to use to protect endangered species.

The chemical imidacloprid demonstrates the 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.

## PROTECTION OF POLLINATORS



**APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.**



Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

**This product can kill bees and other insect pollinators.**

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar. Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

<http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx>.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: [www.aapco.org/officials.html](http://www.aapco.org/officials.html). Pesticide incidents should also be reported to the National Pesticide Information Center at: [www.npic.orst.edu](http://www.npic.orst.edu) or directly to EPA at: [beekill@epa.gov](mailto:beekill@epa.gov)

## **DIRECTIONS FOR USE**

### **RESTRICTED USE PESTICIDE**

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

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed & commercially grown ornamentals that are attractive to pollinators:

#### **1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES**



Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met:

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

## **2. FOR FOOD CROPS AND COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS**



Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

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.

### **RESISTANCE- MANAGEMENT RECOMMENDATIONS**

For resistance-management, please note LIBERTY BIFEN-IMID .5-.25 contains both a Group 3A/bifenthrin and 4A/imidacloprid insecticide. Any insect population may contain individuals naturally resistant to LIBERTY BIFEN-IMID .5-.25 and other Group 3A or 4A insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of LIBERTY BIFEN-IMID .5-.25 or other Group 3A and 4A insecticides within a growing season, or among growing seasons, with different groups that control the same pests. Avoid application of more than the maximum seasonal use rate or the total number of consecutive sprays of

LIBERTY BIFEN-IMID .5-.25 per season.

- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population.  
Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Liberty Crop Protection at 844-425-8488. You can also contact your pesticide distributor or university extension specialist to report resistance.

#### **MANDATORY SPRAY DRIFT MANAGEMENT**

##### **Aerial Applications:**

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed 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.
- If the windspeed is 10 miles per hour or less, applicators must use  $\frac{1}{2}$  swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use  $\frac{3}{4}$  swath displacement upwind at the downwind edge of the field.
- Do not apply during temperature inversions.

##### **Airblast applications:**

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 mph at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions.

**Ground Boom Applications:**

- User must only apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S572).
- 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 manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

**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

## **NON-TARGET ORGANISM ADVISORY STATEMENT (Environmental Hazards):**

This product is highly toxic to bees and other pollinating insects exposed to direct treatment or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and reduce pesticide risk to these organisms.

### **Handheld Technology Applications:**

Take precautions to minimize spray drift.

## **VEGETATIVE FILTER STRIPS**

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing bifenthrin onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).
  - For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met.

The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:

- The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
- Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
- A functional terrace system is maintained on the area of application.
- Water and sediment control basins for the area of application are functional and maintained.
- The area of application is less than or equal to 10 acres.

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. <https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175>

## **GROUND APPLICATIONS**

- Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### Ultra Low Volume (ULV) Aerial Application

- Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Applications made by mosquito control districts and other public health officials are exempt from this requirement

### Non-ULV Aerial Application

- Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### Maximum Allowable LIBERTY BIFEN-IMID .5-.25 Use Per Acre Per Season

Refer to the individual crop sections for maximum allowable LIBERTY BIFEN-IMID .5-.25 usage per acre per season. The maximum allowable use must include all registered use patterns including at-plant, soil applied and/or foliar applications for the 12 month period. The 12 month period is to begin upon the initial application to the acre.

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit <https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators>

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

## **How to Report Bee Kills**

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at [beekill@epa.gov](mailto:beekill@epa.gov). To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: [http://npic.orst.edu/reg/state\\_agencies.html](http://npic.orst.edu/reg/state_agencies.html)

## **Application Instructions:**

Rate of application is variable according to pest pressure, timing of sprays, and field scouting. Use lower rates under light to moderate infestations; use the higher rates within the rate range under heavy insect pressures. Arid climates generally require higher rates.

Use adequate spray volumes, properly calibrated application equipment and appropriate spray adjuvant to obtain thorough coverage. To optimize deposition, penetration, and translocation, use adjuvant at 0.25 - 0.50% v/v.

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip.

**In New York State**, this product may not be applied within 100 feet (using ground equipment) or 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

**California Special Equipment and Restrictions:** LIBERTY BIFEN-IMID .5-.25 must be used in a closed system that meets the criteria for closed systems as established by the California Department of Food and Agriculture. The criteria and a list of the closed systems meeting the criteria are available through the California Department of Food and Agriculture.

### **ROTATIONAL CROPS**

Plant back restrictions are determined by the crop. Crops that have tolerances for both bifenthrin and imidacloprid may be rotated at any time. Crops with tolerances for bifenthrin and not imidacloprid are to be rotated 12 months following the final application of LIBERTY BIFEN-IMID .5-.25. Crops that have tolerances for imidacloprid and not bifenthrin are to be rotated 30 days following the final application of LIBERTY BIFEN-IMID .5-.25.

#### **Plant back restrictions:**

**Immediate plant back:** Crops on this label, as well as, tobacco, tomatoes, eggplant, peppers bell and non-bell, okra, caneberries, citrus, artichoke, lettuce (head and leaf), grapes, spinach, pears, hops, legume vegetables (edible podded), tuberous root and corm vegetables (except sugar beet), cilantro and coriander, soybeans and strawberries.

**30 Day plant back:** Cereals, cucurbits, safflower

**10 Month plant back:** Onion and bulb vegetables

**12 Month plant back:** All other crops

### **MAXIMUM ALLOWABLE USE RATE**

Refer to the individual crop sections for maximum allowable LIBERTY BIFEN-IMID .5-.25 usage. The maximum allowable use must include all registered use patterns including at-plant, soil applied and/or foliar applications for the 12 months period. The 12-month period is to begin upon the initial application to the acreage.

### **Tank Mixture**

LIBERTY BIFEN-IMID .5-.25 may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing.

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.

### **CHEMIGATION USE DIRECTIONS**

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

For LEPA irrigation, a minimum of 0.75 inch of water per acre is recommended. Where non-emulsified oils are used as the diluent, 1 to 2 pints per acre is recommended.

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water. Contact your State Agricultural Extension Service specialists, equipment manufacturers or other experts for consultation on the suitability of the equipment set up to obtain effective control of the target insect-pests.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment. LIBERTY BIFEN-IMID .5-.25 should be applied continuously for the duration of the water application. LIBERTY BIFEN-IMID .5-.25 should be diluted in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation generally is not required when a suitable diluent is used. A diluent test should be conducted to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

**COTTON (PHI 14 DAYS)**

Pest	Use rates	
	Fl Oz/Acre	Pounds ai/Acre
Bandedwinged-whitefly		
Boll weevil		
Cotton aphid		
Cotton fleahopper		
Lygus spp.	14-26	.08-.15
Plant bugs (excludes <i>Lygus hesperus</i> )		
Southern garden leafhopper		
Stink bugs spp.		
Beet armyworm	20-26	.12-.15
Bollworm		
Cabbage looper		
Cotton leaf perforator		
Cutworm spp.		
European corn borer		
Fall armyworm		
Pink bollworm		
Saltmarsh caterpillar		
Tobacco budworm		
Thrips spp.		
Whitefly		
Yellow striped armyworm		

**Restrictions:** Preharvest Interval (PHI): 14 days.

Minimum interval between applications: 7 days.

Maximum amount of LIBERTY BIFEN-IMID .5-.25 allowed per season: 79.36 oz (0.62 lb ai/A).

Maximum amount of Bifenthrin allowed per season: 0.5 lb ai/A.

Maximum amount of Imidacloprid allowed per season: 0.16 lb ai/A.

Do not graze livestock in treated areas or cut treated crops for feed.

Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season.

**APPLICATION INSTRUCTIONS:** Application in Water: Apply in a minimum of 5 gallons per acre with ground equipment or 1 gallon per acre by aircraft. When applying by air, one quart of emulsified oil may be substituted for one quart of water in the finished spray.

ULV Application: Apply the listed rate of LIBERTY BIFEN-IMID .5-.25 in refined vegetable oil in a minimum of 1 quart of finished spray per acre with aircraft calibrated to give adequate coverage.

To Control Boll Weevil: Apply this product at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels.

To Control Aphids: Apply when pest first appears. Repeat as necessary to maintain control. Higher rates will be required once a damaging threshold is established.

**PEANUT<sup>1</sup> (PHI 14 DAYS)**

Pest	Use Rates	
	Fl Oz/Acre	Pounds ai/Acre
Aphid		
Beet armyworm		
Corn earworm		
Cutworm spp.		
Fall armyworm		
Grasshoppers		
Green cloverworm		
Leaf hoppers		
Lesser cornstalk borer		
Loopers	14-22	.08-.13
Rednecked peanut worm		
Southern armyworm		
Southern corn rootworm		
Spider mites		
Stink bugs		
Threecornered alfalfa hopper		
Thrips		
Velvetbean caterpillar		
Whiteflies		
Yellowstriped armyworm		

**Restrictions:** Preharvest Interval (PHI): 14 days.

Minimum interval between applications: 14 days.

Maximum amount of LIBERTY BIFEN-IMID .5-.25 allowed per season: 33.3 oz (0.26 lb ai/A).

Maximum amount of Bifenthrin allowed per season: 0.5 lb ai/A.

Maximum amount of Imidacloprid allowed per season: 0.13 lb ai/A.

**APPLICATION INSTRUCTIONS:**

<sup>1</sup> Use not permitted in California.

Apply foliar treatments in at least 10 gallons per acre with ground equipment at the rate of 11.2 fl oz (0.08 lb active) per acre at a minimum of 14 day intervals. Do not feed preen immature plants and peanut hay to livestock.

**POTATO (PHI 21 days) (Foliar uses)**

Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dasheen (taro); ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; yam, true

Pest	Use Rates	
	Fl Oz/Acre	Pounds ai/Acre
	Foliar Application	
Aphid spp.	14-24	.08-.14
Leafhopper spp.		
Banded cucumber beetle	20-24	.12-.14
Colorado potato beetle		
Cucumber beetle		

European corn borer		
Grasshopper spp.		
Looper spp.		
Flea beetle spp.		
June beetle		
Potato psyllid		
Sugarcane beetle		
Sweetpotato flea beetle		
Sweetpotato weevil		
Tuberworm		
Whitefringed beetle		
Whitefly		

**Restrictions:** Preharvest Interval (PHI): 21 Days

Minimum interval between applications: 7 Days

Maximum amount of LIBERTY BIFEN-IMID .5-.25 allowed per season: 51.2 oz (0.4 lb ai/A)

Maximum, amount of Bifenthrin allowed per season: 0.20 lb al/A.

Maximum amount of Imidacloprid allowed per season: 0.20 lb ai/A.

Maximum amount of LIBERTY BIFEN-IMID .5-.25 per Foliar Application: 12.28 fl oz/A (0.05 lb al/A of Bifenthrin and 0.05 lb ai/A of Imidacloprid)

Maximum amount of LIBERTY BIFEN-IMID .5-.25 per Season: 51.2 fl oz/A (0.20 lb al/A of Bifenthrin and 0.20 lb al/A of Imidacloprid). Two applications are permitted per season. It is permitted to make one at-plant application followed by a foliar application later in the same growing season.

**Foliar Application:** Apply in a minimum of 5 gallons per acre with ground equipment or 1 gallon per acre by aircraft. When applying by air, 1 quart of emulsified oil may be substituted for one quart of water in the finished spray. Thorough coverage is essential to achieve control.

#### LEGUME VEGETABLES (Except Soybeans)

##### DRIED BEANS AND PEAS (PHI 14 DAYS for dried shelled peas or beans)

Include: Dried cultivars of bean (*Lupinus* spp.) (*Phaseolus* spp.); and any one (includes grain lupin, sweet lupin, dried cultivar of pea (*Pisum* white lupin, and white sweet lupin); (*Phaseolus* spp.) (includes field bean, kidney bean, lima bean(dry), navy bean, pinto bean, tepary bean; bean (*Vigna* spp.) (includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea. urd bean): broad bean (dry): chickpea: guar: lablab bean: lentil: pea (*Pisum* spp.) (includes field pea: pigeon pea.)

Pest	Use Rates	
	Fl Oz/Acre	Pounds AI/Acre
Aphid spp.		
Grasshopper		
Leafhopper spp.	14-22	.08-.13
Lygus spp.		
Thrips (adult) (foliage feeding)		

Alfalfa caterpillar		
Armyworm spp*		
Bean leaf beetle		
Cloverworm		
Corn earworm		
Corn rootworm (adult)		
Cucumber beetle		
Cutworm spp.		
European corn borer		
Flee beetle spp.		
Japanese beetle (adult)		
June beetle (adult)	22	.13
Looper spp.		
Mexican bean beetle		
Pea leaf weevil		
Pea weevil		
Sap beetle (adult)		
Saltmarsh caterpillar		
Silverspotted skipper		
Southern armyworm		
Threecornered alfalfa hopper		
Webworm		
Whitefly		

**Restrictions:** Preharvest Interval (PHI): 14 Days

Minimum interval between applications: 7 Days

Maximum amount of LIBERTY BIFEN-IMID .5-.25 allowed per season: 33.6 oz (0.26 lb AI per acre)

Maximum, amount of Bifenthrin allowed per season: 0.13 lbai/A.

Maximum amount of Imidacloprid allowed per season: 0.13 lb ai/A.

**REMARKS:** Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 to 2 quarts of emulsified oil may be substituted for 1 to 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

\* Including all armyworm pests except Beet armyworm.

**SUCCULENT BEANS AND PEAS (PHI 7 DAYS):** Crops in the Succulent Pea and Bean group, Pea (*Pisum* spp.): Dwarf pea, Edible-pod pea, English pea, Garden pea, Green pea, Snow pea, Sugar snap pea, Pigeon pea; Bean (*Phaseolus* spp.): Broadbean (succulent), Lima bean (green), Runner bean, Snap bean, Wax bean; Bean (*Vigna* spp.): Asparagus bean, Blackeyed pea, Chinese longbean, Cowpea, Moth bean, Southern pea, Yardlong bean, Jackbean, Soybean (immature seed) Sword bean.

Pest	Use Rates	
	Fl Oz/Acre	Pounds AI/Acre
Aphid spp.		
Grasshopper	14-22	.08-.13
Leafhopper spp.		

Lygus spp.		
Thrips		
Alfalfa caterpillar		
Bean leaf beetle		
Beet armyworm		
Cloverworm		
Corn earworm		
Corn rootworm (adult)		
Cucumber beetle		
Cutworm spp.		
European corn borer		
Fall armyworm		
Flea beetle	20-22	.12-.13
Japanese beetle (adult)		
Looper spp.		
Pea leaf weevil		
Pea weevil		
Sap beetle (adult)		
Southern armyworm		
Webworm		
Whitefly		
Yellowstriped armyworm		

**Restrictions:** Preharvest Interval (PHI): 7 days.

Minimum interval between applications: 7 days.

Maximum amount of LIBERTY BIFEN-IMID .5-.25 allowed per season: 33.2 oz (0.26 lb ai/A).

Maximum amount of Bifenthrin allowed per season: 0.20 lb ai/A.

Maximum amount of Imidacloprid allowed per season: 0.13 lb ai/A.

**REMARKS:** Application in Water: Apply in a minimum of 5 gallons per acre with ground equipment or 1 gallon per acre by aircraft. When applying by air, one quart of emulsified oil may be substituted for one quart of water in the finished spray.

#### SOYBEANS (PHI 21 DAYS)

Pest	Use Rates	
	Fl Oz/Acre	Pounds AI/Acre
Alfalfa caterpillar		
Aphids		
Aster leafhopper		
Bean leaf beetle		
Beet armyworm*		
Cloverworm		
Corn earworm	14-24	.08-.14
Corn rootworm adult		
Cucumber beetles		
Cutworms		
European corn borer		
Fall armyworm		

Flea beetle
Grasshoppers
Imported cabbageworm
Japanese beetle adult
Leaf hoppers
Leafminer
Loopers
Lygus spp.
Mexican bean beetle (Adult)
Pea leaf weevil
Pea weevil
Plant bug
Saltmarsh caterpillar
Sap beetle
Southern armyworm
Stink bugs
Tarnished plant bug
Thrips
Tobacco budworm*
Twospotted spider mite
Webworms
Western bean cutworm
Whitefly
Yellowstriped armyworm

**Restrictions:** Preharvest Interval (PHI): 21 days.

**\*Use not permitted in California.**

Apply a maximum of two applications per season.

Minimum interval between applications: 30 days.

Maximum amount of LIBERTY BIFEN-IMID .5-.25 allowed per season: 24.4 oz (0.19 lb ai/A).

Maximum amount of Bifenthrin allowed per season: 0.14 lb AI/A.

Maximum amount of Imidacloprid allowed per season: 0.3 lb AI/A.

#### TOBACCO (PHI 14 DAYS)

Pest	Use Rates	
	Fl Oz/Acre	Pounds AI/Acre
Lygus spp.		
Aphid spp.	14-24	.08-.14
Stink bug spp.		
Thrips		
Armyworm spp.		
Chinch bugs		
Cutworm spp.		
Flea beetle (Adults)	20-22	.12-.13
Grasshoppers		
Japanese beetles		

Stalkborers		
Whiteflies		

**Restrictions:** Preharvest Interval (PHI): 14 days.

Minimum interval between applications: 7 days.

Maximum amount of LIBERTY BIFEN-IMID .5-.25 allowed per season: 51.2 oz (0.4 lb ai/A).

Maximum amount of Bifenthrin allowed per season: 0.30 lb ai/A.

Maximum amount of Imidacloprid allowed per season: 0.28 lb ai/A.

Apply a maximum of 2 applications per season.

Do not apply later than layby.

**REMARKS:** Application in Water: Apply. in a minimum of 10 gallons per acre with ground equipment or 5 gallon per acre by aircraft. When applying by air, 1 qt of emulsified oil may be substituted for 1 qt of water in the finished spray.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE AND SPILL PROCEDURES:** Keep out of reach of children and animals. Store in original containers only, in a cool, dry place and avoid excess heat. Do not freeze. Do not store below 40° F. Carefully open containers.

If crystals are observed, warm material to above 60° F by placing container in warm location. Shake or roll container periodically to redissolve solids.

After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area, and keep out animals and unprotected persons. Confine spills.

**To confine spill:** If liquid, dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. 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 of the nearest EPA Regional Office for guidance.

### DISPOSAL STATEMENTS:

**Nonrefillable container:** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at [www.acrecycle.org](http://www.acrecycle.org).

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. If recycling is not available puncture and dispose of in a sanitary landfill or by incineration or if allowed by state and local authorities by burning. If burned stay out of smoke.

**For packages up to 5 gallons. 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  $\frac{1}{4}$  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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold

container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**For packages greater than 56 gallons:** 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.

**For refillable containers:** 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.

#### **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.

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