



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

103591-7

Date of Issuance:

3/28/25

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Bastnate

Name and Address of Registrant (include ZIP Code):

Leah Strayer
Rainbow Agrosiences, LLC
c/o Pyxis Regulatory Consulting Inc.
535 Dock Street, Suite 211
Tacoma, WA 98402

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

Continues page 2

Signature of Approving Official:

Heather E McFarley

Heather McFarley, Product Manager 24
Fungicide Herbicide Branch, Registration Division (7505T)

Date:

3/28/25

2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 103591-7."
3. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 08/14/2024

If you have any questions, please contact Hector Escobar at 202-566-1371 or at escobar.hector@epa.gov.

Enclosure:

- Accepted label

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

{BOOKLET FRONT PANEL}

GLUFOSINATE GROUP 10 HERBICIDE

Bastnate

[Alternate Brand Names: Trusinate, Prism Glufosinate 2.3, Prismatic Glufosinate 2.3]

A non-selective herbicide for post-emergence broadcast use on canola, sweet corn[*], field corn, cotton, soybean, and sugar beet[*] designated as LibertyLink® or glufosinate resistant. Bastnate may be used for weed control in non-LibertyLink® or non-glufosinate resistant cotton when applied with a hooded sprayer in-crop. Bastnate may also be applied as a broadcast burndown application before planting or prior to emergence of canola, sweet corn[*], field corn, cotton, soybean, or sugar beet[*] designated as LibertyLink® or glufosinate resistant and any conventional canola, sweet corn[*], field corn, cotton, soybean, or sugar beet. Bastnate may be used for post-emergence weed control on olives, listed tree, vine and berry crops. Bastnate may also be applied for potato vine desiccation. [*Not registered for use by California.]

ACTIVE INGREDIENT:	WT. BY %
Glufosinate ammonium*	24.5%**
OTHER INGREDIENTS	75.5%
TOTAL:	100.0%

*CAS Number 77182-82-2.
**Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

KEEP OUT OF REACH OF CHILDREN
WARNING/AVISO

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.)

ACCEPTED

03/28/2025

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 103591-7

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15-20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none">Call a poison control center or doctor immediately for treatment advice.Have person sip a glass of water if able to swallow.DO NOT induce vomiting unless told to by a poison control center or doctor.DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">Take off contaminated clothing.Rinse skin immediately with plenty of water for 15-20 minutes.Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN	
If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible followed by charcoal and sodium sulfate administration.	
EMERGENCY NUMBERS	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL (800) 424-9300. For non-emergency information on this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378. Monday through Friday, 8 AM to 12 PM PST. or at http://npic.orst.edu .	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][.] [additional] [Precautionary Statements][.] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

Manufactured [for][by]:
Rainbow Agrosiences, LLC
535 E Plainfield Rd, Suite E
Willowbrook, IL 60527

EPA Reg. No.: 103591-XX
EPA Est.:
Net Contents:
[Lot/Batch code/number]

{Note to reviewer: Lot or Batch number may appear on label or printed directly on packaging.}

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING/AVISO**

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. 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 use.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All Applicators and other handlers must wear:

- Long-sleeved shirt, long pants, shoes, and socks
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Protective eyewear (goggles, face shield or safety glasses)

Applicators using ground boom equipment with open cabs to treat cotton must wear:

- Long-sleeved shirt, long pants
- Shoes, and socks
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils

Mixer/loaders supporting ground boom applications to corn, canola, soybean, cotton, citrus fruit, pome fruit, stone fruit, and olives must wear:

- Long-sleeved shirt, long pants
- Shoes, and socks
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils

User Safety Requirements

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENT

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and 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. **DO NOT** apply to intertidal areas below the mean high water mark. **DO NOT** contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate.

This pesticide is toxic to vascular plants and must be used strictly in accordance with the drift and runoff precautions on this label in order to minimize off-site exposures.

Under some conditions, this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, including no till, limited till and contour plowing. These methods also reduce pesticide run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands, etc., or on the downhill side of fields where run-off could occur to minimize water run-off is advised.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT use with or store near oxidizing agents since hazardous chemical reaction may occur.

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.

Not for Use in Nassau and Suffolk Counties in New York State.

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: The REI for workers engaged in scouting activities in corn, canola, and soybeans is 4 days. The REI for workers to move irrigation piping is 7 days for all crops.

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

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant gloves including barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear (goggles, face shield or safety glasses)

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. The application for trimming and edging, industrial, recreational and public areas, and farmsteads are not within the scope of the WPS.

Keep children and pets out of treated areas until sprays have dried.

IMPORTANT CROP SAFETY INFORMATION READ BEFORE USING THIS PRODUCT

Bastnate may be applied as a burndown treatment prior to planting or prior to emergence of canola, sweet corn[*], field corn, cotton, soybean, or sugar beet[*] designated as LibertyLink® or glufosinate resistant and any conventional canola, sweet corn[*], field corn, cotton, soybean, or sugar beet.

Post-emergence row crop applications of Bastnate may be made only to crops not sensitive to the active ingredient in this product. To the extent consistent with applicable law, Rainbow Agrosiences, LLC does not warrant the use of this product on crops other than those designated as LibertyLink® or glufosinate resistant to safely withstand the application of Bastnate.

The basis of selectivity of Bastnate in crops is the presence of a gene in LibertyLink® or glufosinate resistant crops which results in a plant that is not sensitive to the active ingredient of Bastnate. Crops not containing this gene will be sensitive to Bastnate and severe injury and/or death may occur. **DO NOT** allow spray to contact foliage or green tissue of desirable vegetation other than the LibertyLink® or glufosinate resistant crops.

Bastnate may be applied to any type of cotton using a hooded sprayer.

Applications to trees, nut, vines, and berries must avoid contact of Bastnate solution, spray drift, or mist with green bark, stems, or foliage, as injury may occur to apples, trees nuts, berries, and vines. Only trunks with callused, mature dark brown bark may be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of Bastnate with parts of trees, berries or vines other than mature brown bark can result in serious damage.

[*Not registered for use by California.]

MANDATORY SPRAY DRIFT MANAGEMENT

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use ½ swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- For aerial applications, does not release spray at a height greater than 10 feet above the crop canopy, unless a greater application height is required for pilot safety.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are advised with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

ADVISORY SPRAY DRIFT

POLLINATOR ADVISORY STATEMENT: This product contains an herbicide. Follow all label directions and precautions to minimize potential off-target exposure in order to prevent effects to non-target plants adjacent to the treated site which may serve as habitat or forage for pollinators.

Spray Drift Management:

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

Importance of Droplet Size:

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** (See **Wind, Temperature and Humidity**, and **Temperature Inversions** sections of this label.)

Techniques for Controlling Droplet Size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

Controlling Droplet Size - Aircraft

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations. **AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** - Longer booms increase drift potential. Therefore, a shorter boom length is recommended.
- **Application Height** - Application more than 10 ft. above the canopy increases the potential for spray drift.

Boom Height - Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

Drift Reduction Technology (DRT) - The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs should result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that **DO NOT** meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available: <https://www.epa.gov/reducing-pesticide-drift/environmental-technology-verification-pesticide-spray-drift-reduction>

Wind - Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.** **Note:** Local terrain can influence wind patterns. Every applicator needs to be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity - When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

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

Shielded Sprayers - Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

PRODUCT INFORMATION

Read the entire Directions for Use section before using this product.

Bastnate is a water soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds on LibertyLink® or glufosinate resistant canola, LibertyLink® or glufosinate resistant sweet corn[*], LibertyLink® or glufosinate resistant field corn, LibertyLink® or glufosinate resistant cotton, and LibertyLink® or glufosinate resistant soybean, and on olives, trees, vines, and berries. Bastnate may be applied for potato vine desiccation. Bastnate may also be applied as a broadcast burndown application before planting or prior to emergence of canola, sweet corn[*], field corn, cotton, soybean, or sugar beet[*] designed as LibertyLink® or glufosinate resistant and any conventional canola, sweet corn[*], field corn, cotton, soybean, or sugar beet. [*Not registered for use by California.]

Bastnate is only foliar active with little or no activity in soil. Weeds that emerge after application will not be controlled. Apply Bastnate to actively growing weeds as described in the **WEED CONTROL FOR ROW CROPS** section to get maximum weed control. Uniform thorough spray coverage is necessary to achieve consistent weed control. Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

Bastnate is rainfast four (4) hours after application to most weed species, therefore, rainfall within four (4) hours may necessitate retreatment or may result in reduced weed control.

Application needs to be made between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters and velvetleaf control.

Consult your local Cooperative Extension Service or Rainbow Agrosiences, LLC representative for guidelines on the optimum application timing for Bastnate in your region.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present, or when weeds are under stress due to environmental conditions including drought, cool temperatures, or extended periods of cloudiness.

Restriction: To maximize weed control, **DO NOT** cultivate from 5 days before an application to 7 days after an application.

ROTATIONAL CROP RESTRICTIONS*

Rotational crop planting intervals following application of Bastnate are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Crop To Be Planted	Minimum Rotation Interval (Days) After Last Bastnate Application
Canola, Sweet Corn, Corn, Cotton, Soybeans, and Sugar beets	0 (May be planted at any time.)
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables, and Small Grains (barley, buckwheat, oats, rye, teosinte, triticale, and wheat)	70
All Other Crops	180
*See Application Directions for Potato Vine Desiccation for Rotational Crop Restrictions specifically after Bastnate applications to potatoes.	

WEED RESISTANCE MANAGEMENT

Bastnate is a Group 10 Herbicide, i.e., a glutamine synthetase inhibitor. Any weed population may contain or develop plants naturally resistant to glufosinate and other Group 10 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

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

- Plant into weed-free fields and keep fields as weed-free as possible.
- To the extent possible, use a diversified approach toward weed management. Whenever possible, incorporate multiple weed-control practices including mechanical cultivation, biological management practices, and crop rotation.
- Fields with difficult to control weeds should be rotated to crops that allow the use of herbicides with alternative mechanisms of action or different management practices.
- To the extent possible, **DO NOT** allow weed escapes to produce seeds, roots or tubers. Manage weed seeds at harvest and post-harvest to prevent a buildup of the weed seed-bank.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules. Thoroughly clean plant residues from equipment before leaving fields.
- Prevent an influx of weeds into the field by managing field borders.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weed in the field.
- Use a broad-spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a weed-control program. **DO NOT** use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.
- If resistance is suspected, treat weed escapes with an herbicide with a different MOA or use non-chemical methods to remove escapes.

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

Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

APPLICATION AND MIXING PROCEDURES

DO NOT use flood jet nozzles, controlled droplet application equipment, or air assisted spray equipment. Uniform thorough spray coverage is important to achieve consistent weed control.

Ground Application

Refer to the Rate Tables for proper application rates. Bastnate needs to be applied broadcast in a minimum of 10 gallons of water per acre using a minimum spray pressure of 40 PSI and a maximum ground speed of 10 mph. The use of 80 degree or 110 degree flat fan nozzles is highly advised for optimum spray coverage and canopy penetration. Application of the spray at a 45 degree angle forward will result in better spray coverage. **Under dense weed/crop canopies a broadcast rate of 15-20 gallons of water per acre needs to be used so that thorough spray coverage will be obtained. DO NOT** use raindrop nozzles. See the **SPRAY DRIFT MANAGEMENT** section of this label for additional information on proper application of Bastnate.

Aerial Application

Poor coverage will result in reduced weed control. For optimal weed control, apply Bastnate in a minimum of 10 gallons per acre. See the **SPRAY DRIFT MANAGEMENT** section of this label for additional information on proper application of Bastnate.

COMPATIBILITY TESTING

If Bastnate is to be mixed with pesticide products not listed on this label, test the compatibility of the intended tank mixture prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly. Check compatibility as follows:

1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1 quart jar.
2. For each pound of dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
3. For each 16 fl. oz. of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
4. For each 16 fl. oz. of Bastnate to be applied per acre, add 0.5 teaspoon to the jar.
5. After adding all the ingredients, place a lid on the jar and tighten. Invert 10 times to mix.
6. Let the mixture stand for 15 minutes, and evaluate the solution uniformity and stability. Look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. If the tank mix partners are not compatible, **DO NOT** use the mixture in a spray tank.
7. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **STORAGE AND DISPOSAL** section of this label.

MIXING INSTRUCTIONS

Tank Mix Instructions

Bastnate may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations 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.

No label dosage rates may be exceeded. Bastnate cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rates and restrictions.

Bastnate must be applied with properly calibrated and clean equipment. Bastnate is formulated to mix readily in water. Prior to adding Bastnate to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see **CLEANING INSTRUCTIONS**).

Mix Bastnate with water to make a finished spray solution as follows:

1. Fill the spray tank half full with water.
2. Start agitation.
3. If mixing with a flowable/wettable powder tank mix partner: Prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry to the spray tank.
4. Add the appropriate amount of ammonium sulfate (AMS) to the spray tank.
5. If mixing with a liquid tank mix partner, add the liquid mix partner next.
6. Complete filling the spray tank with water.
7. Add the proper amount of Bastnate and continue agitation.
8. If foaming occurs, use a silicone based antifoam agent.

Ensure that all spray system lines including pipes, booms, etc., have the correct concentration of spray solution by flushing out the spray system lines before starting the crop application.

If tank mix partners specified on this label are added, maintain good agitation at all times until contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to re-suspend the mixture before spraying is resumed. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers must be 50 mesh or larger.

CLEANING INSTRUCTIONS

Before using Bastnate, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank, lines, and filter, particularly if a herbicide with the potential to injure crops was previously used. Equipment must be thoroughly rinsed using a commercial tank cleaner.

After using Bastnate, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink® or glufosinate resistant. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

WEED CONTROL FOR ROW CROPS

Rates in ounces of formulated product per acre for the control of weeds as shown in the weed control tables. In weed populations with mixed species, apply at a rate needed for the species targeting less than three inch weeds.

BROADLEAF WEED CONTROL

Weed Species	C = Control NR = Not Recommended S = Suppression		Weed Species	C = Control NR = Not Recommended S = Suppression	
	22 Fl. Oz./Acre (0.40 lb. a.i./A)	29-43 Fl. Oz./Acre (0.53-0.79 lb. a.i./A)		22 Fl. Oz./Acre (0.40 lb. a.i./A)	29-43 Fl. Oz./Acre (0.53-0.79 lb. a.i./A)
Amaranth, Palmer	NR	C	Morningglory, sharppod	C	C
Anoda, spurred	C	C	Morningglory, smallflower	C	C
Beggarweed, Florida	C	C	Morningglory, tall	C	C
Black, medic	C	C	Mustard, wild	C	C
Blueweed, Texas	C	C	Nightshade, black	C	C
Buckwheat, wild	C	C	Nightshade, eastern black	C	C
Buffalobur	C	C	Nightshade, hairy	C	C
Burcucumber	C	C	Pennycress (stinkweed)	C	C
Canola, volunteer ¹	C ¹	C ¹	Pigweed, redroot	C	C
Catchweed bedstraw (cleavers)	C	C	Pigweed, prostrate	C	C
Carpetweed	C	C	Pigweed, spiny	C	C
Chickweed, common	C	C	Pigweed, smooth	C	C
Cocklebur, common	C	C	Pigweed, tumble	C	C
Copperleaf, Hophornbeam	C	C	Puncturevine	C	C
Cotton, volunteer ¹	C ¹	C ¹	Purslane, common	C	C
Croton, tropic	C	C	Pusley, Florida	S	C
Croton, woolly	C	C	Ragweed, common	C	C
Eclipta	C	C	Ragweed, giant	C	C
Devil's claw	C	C	Senna, coffee	C	C
Fleabane, annual	C	C	Sesbania, hemp	C	C
Galinsoga, hairy	C	C	Shepherd's Purse	C	C
Galinsoga, small flower	C	C	Sicklepod (java bean)	C	C
Groundcherry, cutleaf	C	C	Sida, prickly	C	C
Geranium, cutleaf	C	C	Smartweed, Pennsylvania	C	C
Hempnettle	C	C	Smell melon	C	C
Horsenettle, Carolina ²	C ²	C ²	Sowthistle, annual	C	C
Jimsonweed	C	C	Soybeans, volunteer ¹	C ¹	C ¹
Knotweed	C	C	Spurge, prostrate	C	C
Kochia	C	C	Spurge, spotted	C	C
Ladysthumb	C	C	Starbur, bristly	C	C
Lambsquarters, common	C	C	Sunflower, common	C	C
Mallow, common	C	C	Sunflower, prairie	C	C
Mallow, Venice	C	C	Sunflower, volunteer	C	C
Marestail ³	S ³	C ³	Thistle, Russian ²	S ²	C ²
Marshelder, annual	C	C	Velvetleaf	C	C
Morningglory, entireleaf	C	C	Waterhemp, common	NR	C
Morningglory, ivyleaf	C	C	Waterhemp, tall	NR	C

Morningglory, pitted	C	C			
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¹ Volunteer LibertyLink® or glufosinate resistant crops from the previous season will not be controlled.

² May require sequential applications for control.

³ For optimum control, apply Bastnate on 6" marestail.

GRASS WEED CONTROL

Weed Species	C = Control NR = Not Recommended S = Suppression		Weed Species	C = Control NR = Not Recommended S = Suppression	
	22 Fl. Oz./Acre (0.40 lb. a.i./A)	29-43 Fl. Oz./Acre (0.53-0.79 lb. a.i./A)		22 Fl. Oz./Acre (0.40 lb. a.i./A)	29-43 Fl. Oz./Acre (0.53-0.79 lb. a.i./A)
Barley, volunteer ³	C ³	C ³	Millet, wild proso	C	C
Barnyardgrass	C	C	Millet, proso volunteer	C	C
Bluegrass, annual	C	C	Oat, wild ²	C ²	C ²
Corn, volunteer ¹	C ¹	C ¹	Panicum, fall	C	C
Crabgrass, large ²	C ²	C ²	Panicum, Texas	C	C
Crabgrass, smooth ²	C ²	C ²	Rice, red	C	C
Cupgrass, woolly	C	C	Rice, volunteer ¹	C ¹	C ¹
Foxtail, bristly	C	C	Sandbur, field ²	S ²	C ²
Foxtail, giant	C	C	Shattercane	C	C
Foxtail, green	C	C	Signalgrass, broadleaf	C	C
Foxtail, robust purple	C	C	Sprangletop	C	C
Foxtail, yellow ²	C ²	C ²	Sorghum, volunteer	C	C
Goosegrass ³	C ³	C ³	Stinkgrass	C	C
Johnsongrass, seedling	C	C	Wheat, volunteer ²	C ²	C ²
Junglerice	C	C	Witchgrass	C	C

¹ Volunteer LibertyLink® or glufosinate resistant crops from the previous season will not be controlled. A timely cultivation, 7 to 10 days after an application and/or retreatment for 10-21 days after the first application is advised for controlling dense clumps of volunteer corn or rice.

² For best control of yellow foxtail, field sandbur, crabgrass, and wild oats, treat prior to initiation.

³ A sequential application may be necessary for control.

Biennial and Perennial Weeds**

For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications of Bastnate are specified (29 fl. oz./A (0.53 lb. a.i./A) followed by 43 fl. oz./A (0.79 lb. a.i./A)).

Alfalfa	Clover, Alsike	Nutsedge, purple
Artichoke, Jerusalem	Clover, red	Nutsedge, yellow
Bermudagrass	Dandelion*	Orchardgrass
Bindweed, field	Dock, smooth*	Poinsettia, wild*
Bindweed, hedge	Dogbane, hemp	Pokeweed
Bluegrass, Kentucky	Goldenrod, gray*	Quackgrass
Blueweed, Texas	Johnsongrass, rhizome*	Sowthistle, perennial
Bromegrass, smooth	Milkweed, common*	Thistle, Bull*
Burdock	Milkweed, Honeyvine	Thistle, Canada
Bursage, Woolyleaf	Muhly, wirestem*	Timothy*
Chickweed, Mouse ear	Nightshade, silverleaf*	Wormwood, biennial

*Suppression Only.

See the Application **DIRECTIONS FOR USE ON COTTON section of this label for additional use rates.

CANOLA, SWEET CORN, FIELD CORN, COTTON, SOYBEAN, SUGAR BEETS BURNDOWN

Bastnate may be applied as a burndown treatment prior to planting or prior to emergence of canola, sweet corn[*], field corn, cotton, soybean, or sugar beet[*] designated as LibertyLink® or glufosinate resistant and any conventional canola, sweet corn[*], field corn, cotton, soybean, or sugar beet. For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Bastnate. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. [*Not registered for use by California.]

Crops	Application Directions
Canola, Sweet Corn[*], and Field Corn	If environmental conditions prevent timely applications, a single application may be made of up to 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate. No additional applications of Bastnate may be made post-emergence to the crop during the year.
Cotton	If environmental conditions prevent timely applications, a single application may be made of up to 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate. If more than 29 fl. oz./A (0.53 lb. a.i./A) are used in any single application, the yearly total may not exceed 72 fl. oz./A (1.32 lbs. a.i./A), including all application timings.
Soybean	If environmental conditions prevent timely applications, a single application may be made of up to 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate. If 29-43 fl. oz./A (0.53-0.79 lb. a.i./A) are used in a single burndown application, one additional in season application may be made at up to 29 fl. oz./A (0.53 lb. a.i./A). The yearly total may not exceed 87 fl. oz./A (1.59 lbs. a.i./A), including all application timings.
Sugar Beets[**]	If environmental conditions prevent timely applications, a single application may be made of up to 36 fl. oz./A (0.66 lb. a.i./A) of Bastnate. No additional applications of Bastnate may be made post-emergence to the crop during the year.

[*Not registered for use by California.]

[**Not for use on LibertyLink® or glufosinate resistant sugar beets in California.]

Crop (Conventional)	Burndown	In Season Applications	Yearly Max
Cotton Use Pattern 1	29 fl. oz./A (0.53 lb. a.i./A)	2 applications at 29 fl. oz./A (0.53 lb. a.i./A) ¹ Make second application 10 days after the first application.	87 fl. oz./A (1.59 lbs. a.i./A)
Cotton Use Pattern 2	30 – 43 fl. oz./A (0.55-0.79 lb. a.i./A)	1 application at 29 fl. oz./A (0.53 lb. a.i./A) ¹	72 fl. oz./A (1.32 lbs. a.i./A)
Canola, Soybean, Sweet Corn[*], Field Corn Use Pattern	29 – 43 fl. oz./A (0.53-0.79 lb. a.i./A)	None	43 fl. oz./A (0.79 lb. a.i./A)
Sugar Beets	29 – 36 fl. oz./A (0.53-0.66 lb. a.i./A)	None	36 fl. oz./A (0.66 lb. a.i./A)

¹LibertyLink® or glufosinate resistant cotton OR with hooded sprayer for non LibertyLink® or non- glufosinate resistant varieties (see Cotton use directions).

[*Not registered for use by California.]

Crop (LibertyLink® or glufosinate resistant Varieties Only)	Burndown	In Season Applications (LibertyLink® or glufosinate resistant varieties only)	Yearly Max
Cotton Use Pattern 1	29 fl. oz./A (0.53 lb. a.i./A)	1 to 2 applications at 29 fl. oz./A (0.53 lb. a.i./A) Make second application 10 days after the first application.	87 fl. oz./A (1.59 lbs. a.i./A)
Cotton Use Pattern 2	30 – 43 fl. oz./A (0.55-0.79 lb. a.i./A)	1 application at 29 fl. oz./A (0.53 lb. a.i./A)	72 fl. oz./A (1.32 lbs. a.i./A)
Canola	29 – 43 fl. oz./A (0.53-0.79 lb. a.i./A)	1 to 2 applications at 29 fl. oz./A (0.53 lb. a.i./A) Make second application at least 10 days after the first application.	87 fl. oz./A (1.59 lbs. a.i./A)
Field Corn, Soybean	29 – 43 fl. oz./A (0.53-0.79 lb. a.i./A)	Up to 2 applications at 29 - 43 fl. oz./A (0.53-0.79 lb. a.i./A) For soybeans, make second application at least 5 days after the first application. For field corn, make second application at least 7 days after first application.	87 fl. oz./A (1.59 lbs. a.i./A)
Sweet Corn[*]	22 fl. oz./A (0.40 lb. a.i./A)	1 to 2 applications at 22 fl. oz./A (0.40 lb. a.i./A) Make second application at least 7 days after the first application.	44 fl. oz./A (0.80 lb. a.i./A)

Sugar Beets[*]	29 – 36 fl. oz./A (0.53-0.66 lb. a.i./A)	1 application at 29 fl. oz./A (0.53 lb. a.i./A)	60 fl. oz./A (1.10 lbs. a.i./A)
[*Not registered for use by California.]			

SUGAR BEETS

[(Not registered for use by California.)]

THOROUGH SPRAY COVERAGE IS VERY IMPORTANT. Apply Bastnate only to sugar beets labeled as LibertyLink® or glufosinate resistant. Bastnate works best when weeds are actively growing. A cultivation may be made at least 5 days before a Bastnate application or 5 days after a Bastnate application.

Application Timing

Applications of Bastnate on sugar beets may be made from the cotyledon stage up to the 10-leaf stage of the sugar beet. Bastnate is a foliar active material with no soil residual activity.

Apply to young and actively growing weeds, targeting weeds less than 3 inches in height. For additional information on weed heights, refer to the **WEED CONTROL FOR ROW CROPS** section.

Bastnate will have an effect on weeds that are larger than the specified leaf stage, however, speed of activity and control may be reduced. Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present, or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness. Bastnate is rainfast 4 hours after application, therefore rainfall within 4 hours may necessitate retreatment. For best results, on lambsquarters, Palmer amaranth and velvetleaf control, make applications of Glufosinate between dawn and 2 hours before sunset.

Application Rates

Apply 29 – 36 fluid ounces per acre (0.53 – 0.66 lb. a.i./A) depending on weed species, size and density per weed chart. If a second application is needed, make the second application in a minimum of 10 days after the first application. The maximum annual rate of Bastnate on sugar beets is 60 fl. oz./A (1.10 lbs. a.i./A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (including dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Adjuvants

Ammonium sulfate (AMS) may be used at 1.5 to 3.5 lbs./A. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (including temperature) and potential for leaf burn. AMS has shown to improve weed control of difficult-to-control weeds like lambsquarters and velvetleaf under difficult environmental conditions (including low relative humidity) or hard water. The use of an anti-foam agent is advised.

Surfactants/Oils

The use of additional surfactants or crop oils in tank mixes with Bastnate may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality

Use medium to coarse nozzles. Bastnate is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

Use Restrictions on Sugar Beets

- **DO NOT** apply more than 36 fl. oz./A (0.66 lb. a.i./A) of Bastnate in a single application for burndown use.
- **DO NOT** apply more than 29 fl. oz./A (0.53 lb. a.i./A) in a single application for in-crop use (only 1 in-crop use allowed if burndown applications is made).
- **DO NOT** apply more than 60 fl. oz./A (1.10 lbs. a.i./A) of Bastnate on sugar beets per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** make more than 2 applications per year with a minimum 10-day retreatment interval.
- **DO NOT** apply Bastnate within 60 days of harvesting sugar beets.
- **DO NOT** plant rotation crops in a field treated with Bastnate within 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale, which may be planted 70 days after the last application of this product. Corn, soybeans, canola, and sugar beets containing LibertyLink® or glufosinate resistant trait may be planted at any time.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** add surfactants. Antifoams or drift control agents may be added if needed.
- **DO NOT** apply Bastnate if sugar beets show injury from prior herbicide or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

CANOLA

Apply Bastnate only to canola labeled as LibertyLink® or glufosinate resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Rate and Timing

For best results, apply to emerged, young actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Bastnate. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of Bastnate on canola may be made from the cotyledon stage up to the early bolting stage of the canola. Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth maturity or yield.

Apply Bastnate at 22 – 29 fl. oz./A (0.40 – 0.53 lb. a.i./A) per application. A second application of Bastnate may be needed to control weeds that have not yet emerged at the time of application.

Use Restrictions on Canola

- **DO NOT** use on canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) in a single application for burndown use.
- **DO NOT** apply more than 29 fl. oz./A (0.53 lb. a.i./A) in a single application for in crop use.
- **DO NOT** make more than 1 application for burndown use for all crops.
- If Bastnate was used in a burndown application in non-glufosinate resistant canola, **DO NOT** make post-emergence applications.
- **DO NOT** make more than 2 in crop applications per year with a minimum 10-day retreatment interval.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of Bastnate per year.
- **DO NOT** apply Bastnate within 65 days of harvesting canola.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** apply Bastnate if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

Refer to the “**ROTATIONAL CROP RESTRICTIONS**” section under the “**PRODUCT INFORMATION**” heading of this label for the appropriate rotational crop plant back intervals.

Spray Additives

Bastnate must be applied with ammonium sulfate (AMS). Use only fine feed grade or spray grade AMS at 3 pounds per acre. Anti-foams or drift control agents may be added if needed. Use of additional surfactants or crop oils may increase risk of crop response.

Tank Mix Instructions for Use on Canola

Bastnate at 22 fl. oz./A (0.40 lb. a.i./A) plus AMS may be used in tank mix combination with certain herbicides for improved control of larger than labeled grasses. 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. The AMS rate may be reduced to 1.5 lbs./A when Bastnate is tank mixed with a reduced rate of one of the grass herbicides specified below.

Tank Mix Partners for Bastnate on Invigor LibertyLink® or glufosinate resistant Canola

Clethodim	Quizalofop-p-ethyl	Sethoxydim
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APPLICATION RATE AND TIMING FOR CANOLA FOR LIBERTYLINK® OR GLUFOSINATE RESISTANT SEED PROPAGATION

[(Not registered for use by California.)]

Up to three applications of Bastnate at up to 29 fl. oz./A (0.53 lb. a.i./A) per application may be made to canola for LibertyLink® or glufosinate resistant seed propagation. Applications may be made from the cotyledon stage up to the early bolting stage (e.g., BBCH 18-30, between just prior to stem elongation/bolting, eight or more leaves and beginning of stem elongation, no internodes).

Use Restrictions on Canola for LibertyLink® or glufosinate resistant Seed Propagation

- **DO NOT** apply more than 29 fl. oz./A (0.53 lbs. a.i./A) in a single application.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of Bastnate per year.
- **DO NOT** apply more than 3 applications of Bastnate per year with a minimum 10-day retreatment interval.
- **DO NOT** apply Bastnate beyond the early bolting stage or within 65 days of harvesting canola seed.
- **DO NOT** use treated canola seed for food, feed or oil purposes.

- **DO NOT** apply Bastnate if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

SWEET CORN

[(Not registered for use by California.)]

Apply Bastnate only to corn labeled as LibertyLink® or glufosinate resistant.

Application Timing

Applications for Bastnate on sweet corn may be made from emergence until sweet corn is 24" tall or in the V-6 stage of growth (i.e., 6 developed collars), whichever comes first. Apply at a rate of 22 fl. oz./A (0.40 lb. a.i./A). Bastnate must be applied with ammonium sulfate (AMS) for use on sweet corn. Two applications of Bastnate can be made to sweet corn in a year.

Use Restrictions on Sweet Corn

- **DO NOT** apply more than 22 fl. oz./A (0.40 lb. a.i./A) in a single application for burndown use.
- **DO NOT** apply more than 22 fl. oz./A (0.40 lb a.i./A) in a single application.
- **DO NOT** apply more than 44 fl. oz./A (0.80 lb. a.i./A) of Bastnate on sweet corn per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** apply more than 2 applications of Bastnate to sweet corn per year with a minimum 10-day retreatment interval.
- **DO NOT** apply Bastnate within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- If Bastnate was used in a burndown application, no post-emergence applications may be made to the crop.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply Bastnate if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

Refer to the "**ROTATIONAL CROP RESTRICTIONS**" section under the "**PRODUCT INFORMATION**" heading of this label for the appropriate rotational crop plant back intervals.

See "**Directions for Use on Field Corn and Silage Corn**" for Application Methods, Mixing Instructions, and Weed Control Tables.

Tank Mix Instructions for Use on Sweet Corn

Bastnate may be tank mixed with tembotrione, mesotrione, atrazine, or halosulfuron. When using Bastnate in tank mix combinations, carefully follow the "Directions for Use" labeling of the selected partner. 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.

FIELD CORN AND SILAGE CORN

Apply Bastnate only to corn labeled LibertyLink® or glufosinate resistant. Uniform thorough spray coverage is necessary to achieve consistent weed control.

Application Rate and Timing

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Bastnate. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimal yield, early season weed removal is important.

Applications of Bastnate on corn may be made with over the top broadcast or drop nozzles from emergence until corn is 24 inches tall or in the V-6 stage of growth (i.e., 6 developed collars), whichever comes first. For corn 24 inches to 36 inches tall only apply Bastnate using ground application and drop nozzles and avoid spraying into the whorl or leaf axils of the corn stalks. Applications of Bastnate following the use of soil applied insecticides will not injure corn.

Apply Bastnate at 29 – 43 fl. oz./A (0.53 – 0.79 lb. a.i./A) per application. A second application of Bastnate or a tank mix application with a residual herbicide will be needed to control weeds that have not yet emerged at the time of application.

Use Restrictions on Field Corn and Silage Corn

- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) in a single application for burndown use.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb a.i./A) in a single application..
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of Bastnate on corn per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** apply more than 2 applications of Bastnate to corn per year with a minimum 10-day retreatment interval.
- **DO NOT** apply Bastnate within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.

- If Bastnate was used in a burndown application, no post-emergence applications may be applied to the crop.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply Bastnate if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

Refer to the “**ROTATIONAL CROP RESTRICTIONS**” section under the “**PRODUCT INFORMATION**” heading of this label for the appropriate rotational crop plant back intervals.

Spray Additives

For corn and sweet corn, Bastnate must be applied with ammonium sulfate (AMS). It is advised to use only fine feed grade or spray grade AMS at 3 lbs. per acre (17 lbs./100 gallons). When temperatures exceed 85°F, the rate of AMS can be reduced to 1.5 lbs. per acre (8.5 lbs./100 gallons) to reduce potential leaf burn. Use of additional surfactants or crop oils may increase risk of crop response.

Tank Mix Instructions for Use on Corn

Certain herbicide tank mixes may aid in the performance of Bastnate. No additional surfactant is needed with any tank mix partner. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mix Partners for Bastnate on LibertyLink® or glufosinate resistant Corn

2,4-D	Dimethenamide-P	Pendimethalin ¹
Acetochlor	Flumetsulam	Primisulfuron-methyl
Atrazine	Glyphosate	Prosulfuron
Carfentrazone-ethyl	Halosulfuron-methyl	S-metolachlor ²
Clopyralid potassium	Mesotrione	Tembotrione
Dicamba	Metolachlor ²	Theincarbazone-methyl
Diflufenopyr	Nicosulfuron	Topramezone
¹ Tank mixing with pendimethalin may result in reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail, and volunteer corn.		
² It is advised that these products are tank mixed at half the use rate with Bastnate to reduce risk of crop response.		

Corn Insecticide Tank Mix Partners for Bastnate

To provide weed and insect control in corn, Bastnate may be mixed with the following insecticides:

Beta-Cyfluthrin	Lamba-Cyhalothrin
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COTTON

Uniform thorough spray coverage is necessary to achieve consistent weed control. Bastnate may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to LibertyLink® or glufosinate resistant cotton. This product may be applied post-emergence to non-LibertyLink® or non-glufosinate resistant cotton, varieties or cultivars by using equipment designed to minimize contact of the spray with the cotton foliage. See the **Application Methods on Non-LibertyLink® or non-glufosinate resistant Cotton** section for selection of shielding equipment. Severe injury or death may result if the Bastnate contacts the foliage or stems of cotton NOT labeled as LibertyLink® or glufosinate resistant.

Application Rate and Timing

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Bastnate. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. For optimum yield, early season weed removal is important.

Apply Bastnate to cotton from emergence up to the early bloom stage at 29 fl. oz./A (0.53 lb. a.i./A). If environmental conditions prevent a timely herbicide application, a single application of up to 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate may be made to cotton. If more than 29 fl. oz./A (0.53 lb. a.i./A) are used in any single application, the yearly total may not exceed 72 fl. oz./A (1.32 lbs. a.i./A), including all application timings. See Restrictions to the Directions for use on Cotton below for additional information.

Refer to the **WEED CONTROL FOR ROW CROPS** section of this label for selection of the proper rate dependent upon weed species present and size. In weed populations with mixed species, select the highest rate required to control all the species. Volunteer LibertyLink® or glufosinate resistant crop plants (corn, cotton, soybeans, sugar beets) from the previous season will not be controlled by applications of Bastnate. A repeat application of Bastnate or tank mixes with a residual herbicide will be needed to control weeds that have not emerged at the time of application. See the Tank Mix Instructions for Use on Cotton to select suitable tank mix partners.

Use Pattern	1 st Application	2 nd Application Minimum 10 days up to 14 days after 1 st application	3 rd Application Minimum 10 days up to 14 days after 2 nd application	Yearly Maximum
Option 1	32 - 43 fl. oz./A (0.58-0.79 lb. a.i./A)	29 fl. oz./A (0.53 lb. a.i./A)	None	72 fl. oz./A (1.32 lbs. a.i./A)
Option 2	29 fl. oz./A (0.53 lb. a.i./A)	29 fl. oz./A (0.53 lb. a.i./A)	29 fl. oz./A (0.53 lb. a.i./A)	87 fl. oz./A (1.59 lbs. a.i./A)

Use Restrictions on Cotton

- **DO NOT** apply Bastnate to cotton in Florida - South of Tampa (Florida Route 60), or in Hawaii (except for test plots or breeding nurseries).
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) per application for burndown use.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) per application for in-crop use.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** apply more than 3 applications per year when using reduced rates with a minimum 10-day retreatment interval.
- **DO NOT** apply Bastnate within 70 days prior to cotton harvest.
- If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of Bastnate at up to 43 fl. oz./A (0.79 lb. a.i./A) may be made to cotton. **DO NOT** apply more than 43 fl. oz. (0.79 lb. a.i./A) of Bastnate in a single application under this use scenario. If a single application greater than 29 fl. oz. (0.53 lb. a.i./A) is made, a subsequent application not to exceed 29 fl. oz. (0.53 lb. a.i./A) may be made to cotton. The yearly total use rate under this scenario may not exceed 72 fl. oz./A (1.32 lbs. a.i./A) of Bastnate. Sequential applications need to be made at least 10 days apart.
- **DO NOT** apply this product through any type of irrigation system.

Refer to the “**ROTATIONAL CROP RESTRICTIONS**” section under the “**PRODUCT INFORMATION**” heading of this label for the appropriate rotational crop plant back intervals.

Application Methods - LibertyLink® or glufosinate resistant Cotton

Refer to the **WEED CONTROL FOR ROW CROPS** section to select the proper application rate based upon the weeds present and their size. Uniform and thorough spray coverage is required to achieve consistent weed control. For ground application, apply Bastnate to LibertyLink® or glufosinate resistant cotton as an over-the-top foliar spray directed to the lower one-third of the cotton stand.

Application Methods - Non-LibertyLink® or non-glufosinate resistant Cotton

Application of Bastnate to cotton varieties not labeled as LibertyLink® or glufosinate resistant requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. A hooded sprayer directs the spray onto weeds, while shielding the cotton stand from contact. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid exposure of the desirable vegetation to the spray.

With a hooded sprayer, the spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground. If the hoods are raised, spray particles may escape and come into contact with the cotton, causing damage or destruction of the crop.

Herbicide rates and spray volume instructions are presented as broadcast equivalents and must be reduced in proportion to the area actually treated. Use the following formulas to calculate the correct rate and volume per planted (field) acre:

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Rate per Acre} = \text{Amount of Banded Product needed per Acre}$$

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Broadcast Spray Volume per Acre} = \text{Banded Spray Volume needed per Acre}$$

Post-Harvest

Bastnate may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate may be applied in a single application to control larger weeds growing in the crop at the time of harvest. If more than 29 fl. oz./A (0.53 lb. a.i./A) is used in a single application, the yearly total may not exceed 72 fl. oz./A (1.32 lbs. a.i./A), including all application timings. Refer to the “**ROTATIONAL CROP RESTRICTIONS**” section of this label for appropriate rotational crop information.

Tank Mix Instructions for Use on Cotton

Certain tank mixes may aid in the performance of Bastnate. No additional surfactant is needed with any tank mix partner. Bastnate may be applied in tank mix combination with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. 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.

LibertyLink® or glufosinate resistant Cotton – For LibertyLink® or glufosinate resistant cotton, S-Metolachlor/Metolachlor or Pyriithiobac-sodium may be tank mixed with Bastnate and applied over the top post-emergence to enhance weed control and/or provide residual control.

All Cotton Types – The following herbicides may be tank mixed with Bastnate for hooded spray application to enhance weed control and/or provide residual weed control.

Post-Emergence Over-The-Top Tank Mix Partners for Bastnate on LibertyLink® or glufosinate resistant Cotton

Clethodim	Metolachlor	Sethoxydim
Fenoxaprop-p-ethyl	Pyriithiobac-sodium	
Fluazifop-P-butyl	Quizalofop-p-ethyl	

SOYBEANS

Apply Bastnate only to soybean designated as LibertyLink® or glufosinate resistant. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Rate and Timing

For best results apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Bastnate. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Adding ammonium sulfate with Bastnate may improve weed control if weeds are under stress. For optimal yield, early season weed removal is important.

Applications of Bastnate on soybeans may be made from emergence up to but not including the bloom growth stage. Apply Bastnate to LibertyLink® or glufosinate resistant soybeans from emergence up to but not including the bloom growth stage at 29 to 43 fl. oz./A. (0.53 to 0.79 lb. a.i./A). See weed chart to determine rate. If environmental conditions prevent a timely herbicide application, a single application of up to 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate may be made to soybeans followed by one additional application at maximum of 43 fl. oz./A (0.79 lb. a.i./A) with a yearly maximum of 87 fl. oz./A (1.59 lbs. a.i./A). Bastnate may be applied alone or in a tank mix application with a residual herbicide to control weeds that have not yet emerged at the time of application.

Although timely post applications of Bastnate can provide complete weed control, residual herbicides at burndown planting, or tank mixed with Bastnate help ensure optimal weed management, particularly if environmental conditions delay timely post applications. Residual herbicides can also reduce early season weed competition and are a key element of good weed resistance management practices.

Use Pattern Rate Ranges		
1 st Application	2 nd Application Minimum of 5 days after 1 st Application	Yearly Maximum
29 – 43 fl. oz./A (0.53-0.79 lb. a.i./A)	29 – 43 fl. oz./A (0.53-0.79 lb. a.i./A)	87 fl. oz./A (1.59 lbs. a.i./A)

Use Restrictions on Soybeans

- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate in a single application for burndown use.
- **DO NOT** apply more than 43 fl. oz./A (0.79 lb. a.i./A) of Bastnate in a single application.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) of Bastnate on soybeans per year.
- **DO NOT** make more than 1 application for burndown use for all crops.
- **DO NOT** make more than 3 applications per year (including burndown) when using reduced rates with a minimum 5-day retreatment interval.
- **DO NOT** apply Bastnate within 70 days of harvesting soybean seed.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply Bastnate if soybeans show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

Refer to the “**ROTATIONAL CROP RESTRICTIONS**” section under the “**PRODUCT INFORMATION**” heading of this label

for the appropriate rotational crop plant back intervals.

Tank Mix Instructions for Use on Soybeans

Certain herbicide tank mixes may complement Bastnate. No additional surfactant is needed with any tank mix partner. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mix Partners for Bastnate in LibertyLink® or glufosinate resistant Soybeans

Acifluorfen	Flumioxazin	Quizalofop-p-ethyl
Clethodim	Fomesafen	Saflufenacil
Chlorimuron	Imazamox	Sethoxydim
Cloransulam-methyl	Imazethapyr	S-Metolachlor
Fenoxaprop-p-butyl	Lactofen	Thifensulfuron
Fluazifop-P-butyl	Metolachlor	
Flumiclorac	Pyroxasulfone	

CANOLA, CORN, COTTON, AND SOYBEAN SEED PROPAGATION

Bastnate may be applied to select out susceptible "segregates" of canola, corn, cotton, and soybean that aren't LibertyLink® or glufosinate resistant.

Canola: Bastnate may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that **DO NOT** carry a LibertyLink® or glufosinate resistant gene and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the LibertyLink® or glufosinate resistant gene will be severely injured or killed if treated with this herbicide. See **Directions for Use on Canola** for use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Canola**".

Corn: Inbred lines (plants not possessing the LibertyLink® or glufosinate resistant gene) will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of LibertyLink® or glufosinate resistant corn segregates, Bastnate may be applied at 22 fl. oz./A (0.40 lb. a.i./A) plus AMS at 3 lbs./A (17 lbs./100 gallons) when corn is in the V-3 to V-4 stage of growth (i.e., 3 to 4 developed collars). A second treatment of 22 fl. oz./A (0.40 lb. a.i./A) plus AMS at 3 lbs./A may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24" tall. Sequential applications need to be at least 10 days apart. When temperatures exceed 85°F, the rate of AMS can be reduced to 1.5 lbs./A (8.5 lbs./100 gallons) to reduce potential leaf burn. See **Directions for Use on Corn** for further information on use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Sweet Corn**" and "**Use Restrictions on Field Corn and Silage Corn**".

Cotton: Bastnate may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that **DO NOT** carry the LibertyLink® or glufosinate resistant gene and as such, can be applied to remove susceptible segregates during cotton seed propagation.

Breeding material not possessing the LibertyLink® or glufosinate resistant gene will be severely injured or killed if treated with this herbicide. See **Directions for Use on Cotton** for use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Cotton**".

Soybean: For the selection of LibertyLink® or glufosinate resistant soybean (segregates), Bastnate may be applied at up to 29 to 43 fl. oz./A (0.53-0.79 lb. a.i./A) when soybean is in the third trifoliate stage. A second treatment of 29 to 43 fl. oz./A (0.53-0.79 lb. a.i./A) may be applied up to but not including the bloom growth stage of soybean. Sequential applications need to be at least 5 days apart. See **Directions for Use on Soybean** for further information on use rates and application timing. Follow applicable restrictions listed in the section "**Use Restrictions on Soybeans**".

LISTED TREE, VINE, AND BERRY CROPS

Apply Bastnate to the tree, vine, and berry crops listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Registered Crops

Bushberry Crop Subgroup 13-07B – Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; cranberry, highbush; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; seas buckthorn; cultivars, varieties, and/or hybrids of these

Citrus (Crop Group 10-10) – lemon, orange (sour, sweet), grapefruit, lime, mandarin, tangerine, tangelo, calamondin, kumquat, pummelo, Satsuma, citron, citrus hybrids, tangor, and cultivars, varieties and/or hybrids of these Olives

Pome Fruit (Crop Group 11-10) – apple, pear (oriental), crabapple, loquat, mayhaw, quince, azarole, medlar, tejocote, cultivars, varieties and/or hybrids of these

Stone Fruit (Crop Group 12-12) – apricot, cherry (sweet tart), peach, nectarine, plum (Chickasaw, damson, Japanese), plumcot, prune (fresh), capulin, jujube, sloe, and cultivars, varieties and/or hybrids of these

Tree Nuts (Crop Group 14-12) – almond, beechnut, Brazil nut, butternut, cashew, chestnut, chinquapin, hazelnut (filbert), hickory nut, macadamia nut (bush nut), pecan, pistachio, walnut, black, walnut, English

Fruit, small, vine climbing, except fuzzy kiwifruit (Crop Subgroup 13-07F) – Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; cultivars, varieties, and/or hybrids of these

Application Rate and Timing

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Bastnate. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. **DO NOT** retreat these weeds with Bastnate until sufficient regrowth has occurred.

Apply Bastnate as a directed spray to control undesirable vegetation in tree, vine, and berries listed on this label. Apply as a broadcast, banded or spot treatment application depending on the situation to control weeds listed under the heading Weeds Controlled in Tree, Vine, and Berry crops. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of Bastnate may be necessary to control plants generating from underground parts or seed.

Avoid contact of Bastnate solution, spray, drift or mist with green bark, stems, or foliage, as injury may occur to trees, vines, and berries. **Only trunks with callused mature brown bark may be sprayed unless protected from spray contact by nonporous wraps, grow tubes, or waxed containers. Contact of Bastnate with parts of trees, vines, or berries other than mature brown bark can result in serious damage.**

Application Methods - Broadcast Applications

Apply Bastnate at the rates listed below for broadcast applications based on weed size and stage of growth.

Weed Size and Stage	Bastnate Rate
Weeds < 3" in height	48 fl. oz./A (0.88 lb. a.i./A)
Weeds < 6" in height pre-tiller grasses	56 fl. oz./A (1.02 lbs. a.i./A)
Weeds > 6" in height, and or/grasses that have tillered	56 – 82 fl. oz./A (1.02-1.50 lbs. a.i./A)

Application Methods - Banded Spray Applications

Banded applications may be used using the following formula to calculate the amount of herbicide needed for orchard or vineyard strip sprays:

$$\frac{\text{Band Width in Inches}}{\text{Row Width in Inches}} \times \text{Rate per Acre Broadcast} = \text{Amount of Herbicide Needed for Treatment}$$

Application Methods - Spot or Directed Spray Applications

For spot or directed spray applications by backpack sprayers only (no mechanically pressured handgun applications allowed), mix Bastnate at 1.7 fl. oz. of product (0.03 lb. a.i./A) per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use.

Weeds Controlled in Tree, Vine, and Berry Crops

Broadleaf Weeds			
Alkali sida	Fleabane, annual	Morningglory, ivyleaf	Smartweed, Pennsylvania
Ammannia, purple	Goosefoot	Morningglory, pitted	Sowthistle, annual
Arrowhead, California	Gromwell, field	Mullein, turkey	Spurge, prostrate
Buckwheat, wild	Groundcherry, cutleaf	Mustard, wild	Starthistle, yellow
Buffalobur	Groundsel, common	Nettle	Sunflower, common
Burclover, California	Henbit	Nightshade, black	Sunflower, prairie
Carpetweed	Jimsonweed	Nightshade, eastern black	Sunflower, volunteer
Chickweed, common	Knotweed	Nightshade, hairy	Swinecress
Chinese, thornapple	Kochia	Pennycress	Thistle, Russian
Cocklebur, common	Lambsquarters, common	Pigweed, redroot	Turnip, wild
Copperleaf, Virginia	Lettuce, miner's	Pineapple weed	Velvetleaf
Cudweed	Lettuce, prickly	Puncturevine	Vervain
Cutleaf Evening primrose	London rocket	Purslane, common	Vetch
Dodder	Mallow, common	Radish, wild	Virginia copperleaf
Eclipta	Malva (little mallow)	Ragweed, common	Willowherb, panicle
Fiddleneck	Marestail	Ragweed, giant	
Filaree	Mayweed	Redmaids	
Filaree, redstem	Morningglory, entireleaf	Shepherd's Purse	

Grass Weeds			
Barnyardgrass	Crabgrass, smooth	Junglerice	Shattercane
Bluegrass, annual	Cupgrass, woolly	Oat, wild	Sprangletop
Brome, ripgut	Foxtail, giant	Panicum, fall	Stinkgrass
Bromegrass, downy	Foxtail, green	Panicum, Texas	Wheat, volunteer
Canarygrass	Foxtail, yellow	Rush, toad**	Windgrass
Chess, soft	Goosegrass	Ryegrass, annual*	Witchgrass
Crabgrass, large	Johnsongrass, seedling	Sandbur, field	
Biennial and Perennial Weeds			
Aster, white heath	Dallisgrass	Mustard, tansy	<i>Rubus</i> spp.
Bindweed, field	Dandelion	Nutsedge, purple	Spurge, leafy
Bindweed, hedge	Dock, curly	Nutsedge, yellow	Thistle, bull
Bluegrass, Kentucky	Dogbank, hemp	Onion, wild	Thistle, musk
Bromegrass, smooth	Fescue	Orchardgrass	Torpedograss
Bulrush**	Goldenrod, gray	Paragrass	Vaseygrass
Burdock	Guineagrass	Plantain	Woodsorrel
Canada thistle	Horsetail	Poison ivy/oak	Yarrow, common
Clover, alsike	Love grass	Quackgrass	
Clover, red	Mugwort	Rocket, yellow	
Clover, white	Mullein, common	Rose, wild	
* Apply to annual ryegrass prior to 3 inches in height.			
** Indicates suppression.			

Use Restrictions on Tree, Vine, and Berry Crops

- **DO NOT** exceed the maximum single application rate of 82 fl. oz./A (1.50 lbs. a.i./A).
- **DO NOT** apply more than 164 fl. oz. of Bastnate per acre (3 lbs. a.i./A) to berry bushes and stone fruit in a 12-month period.
- **DO NOT** apply more than 246 fl. oz. (4.5 lbs. a.i./A) of this product per acre to tree nuts, vines, pome fruit, citrus, and olives in a 12-month period.
- **DO NOT** make more than 2 applications at a maximum rate of 82 fl. oz. per acre (1.5 lbs. a.i./A) per application to berry bushes and stone fruit.
- **DO NOT** make more than 3 applications at a maximum rate of 82 fl. oz. per acre (1.5 lbs. a.i./A) per application to tree nuts, vines, pome fruits, citrus, and olives.
- For spot applications, **DO NOT** exceed 1.88 fl. oz. (0.0344 lb a.i.) per 1000 square feet per application.
- For spot applications, **DO NOT** exceed 5.65 fl. oz. (0.103 lb a.i.) per 1000 square feet per year.
- **DO NOT** graze, harvest, and/or feed treated orchard cover crops to livestock.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply this product aerially to tree, berry, or vine crops.
- **DO NOT** apply this product within 14 days of nut, fruit, berry, or grape harvest.
- Separate sequential applications by at least 14 days in citrus fruits, pome fruits, and olives.
- Separate sequential applications by at least 28 days in stone fruit.
- Separate sequential applications by at least 14 days in berry bushes.
- **DO NOT** make spot spray applications to suckers, as tree injury may occur.
- **DO NOT** make spot or directed spray applications to tree or vine trunk as injury may occur.
- **DO NOT** allow spray to contact trunks other than those that have callused, mature brown bark or are protected from spray contact by nonporous wraps, grow tubes, or waxed containers.

Sucker Control with Bastnate

Bastnate will reduce or eliminate sucker growth when applied to suckers that are young, green, and uncalled. For sucker control, apply a split application approximately 4 weeks apart at 56 fl. oz. of product/A (1.02 lbs. a.i./A). Coverage of all sucker foliage is necessary for optimum control. Suckers must not exceed 12 inches in length.

Tank Mix Partner Instructions for Use on Tree, Vine, and Berry Crops

Bastnate does not provide residual weed control or control of unexposed plant parts. Certain herbicide tank mixes may aid in the performance of Bastnate or be added to provide residual herbicide activity. No additional surfactant is needed with any tank mix partner. 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.

Diuron	Norflurazon	Terbacil
Flumioxazin	Oryzalin	
Napropamide	Simazine	

POTATO VINE DESICCATION

Application Rate and Timing

Apply Bastnate at the beginning of natural senescence of potato vines. Apply 21 fl. oz./A (0.38 lb. a.i./A). **DO NOT** split this application or apply more than one application per harvest. Potato varieties with heavy or dense vines may require an application of another desiccation product to complete vine desiccation.

Thorough coverage of the potato vines to be desiccated is essential. Use a sufficient volume of water (20 to 100 gpa) to obtain a thorough coverage of the potato vines. Vary the gallons of water per acre and the spray pressure as indicated by the density of the potato vines to assure thorough spray coverage. Increase the spray volume to at least 30 gallons of water per acre when the potato vine canopy is dense or under cool and dry conditions. Apply Bastnate with the spray boom as low as possible to achieve thorough coverage of the potato vines for best control and to minimize drift potential.

Use Restrictions in Potato Vine Desiccation

- **DO NOT** apply more than 21 fl. oz./A (0.38 lb. a.i./A) in a single application.
- **DO NOT** apply more than 21 fl. oz./A (0.38 lb. a.i./A) to potato vines per year.
- **DO NOT** make more than 1 application per year to potato vines.
- **DO NOT** harvest potatoes until 9 days or more after application of Bastnate.
- **DO NOT** apply to potatoes grown for seed.
- Potatoes, canola, corn, cotton, soybean, and sugar beets may be planted at any time after the application of Bastnate as a potato vine desiccant.
- **DO NOT** plant treated areas to wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale until 30 or more days after an application of Bastnate as a potato vine desiccant.
- **DO NOT** plant treated areas to crops other than those listed in this use precautions section until 120 or more days after an application of Bastnate as a potato vine desiccant.
- **DO NOT** plant treated areas to root and tuber vegetables, leafy vegetables, and Brassica vegetables until 70 days after an application of Bastnate as a potato vine desiccant.

FALLOW FIELDS OR POST-HARVEST

Bastnate may be used as a substitute for tillage in fallow fields to control or suppress weeds listed in the **WEED CONTROL FOR ROW CROPS** section of this label. Applications may be made in fallow fields, post-harvest, prior to planting or emergence of canola, sweet corn, field corn and silage corn, cotton, soybean, sugar beet, bushberry (subgroup 13-07B), citrus (crop group 10-10), pome fruit (crop group 11-10), stone fruit (crop group 12-12), tree nuts (crop group 14-12), fruit, small, vine climbing, except fuzzy kiwifruit (subgroup 13-07F) and potato vine desiccation.

Apply Bastnate at 22 (0.40 lb. a.i./A) or 29 fl. oz./A (0.53 lb. a.i./A) to fallow fields to control specific weeds. Bastnate must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are advised with Bastnate to enhance total weed control. When using Bastnate in tank mix combinations, follow the precautions and directions for use of the most restrictive label. See the **Application and Mixing Procedures** section of this label for additional information on how to apply this product. See the **PRODUCT INFORMATION** section of this label for rotational crop restrictions.

Use Restrictions in Fallow Fields or Post-Harvest

- **DO NOT** apply more than 29 fl. oz./A (0.53 lb. a.i./A) in a single application.
- **DO NOT** apply more than 87 fl. oz./A (1.59 lbs. a.i./A) per year.
- **DO NOT** make more than 3 applications per acre per year.
- **DO NOT** make sequential applications sooner than 14 days apart.
- **DO NOT** exceed restrictions specified in the crop specific use directions for canola, sweet corn, field corn and silage corn, cotton, soybean, sugar beet, bushberry (subgroup 13-07B), citrus (crop group 10-10), pome fruit (crop group 11-10), stone fruit (crop group 12-12), tree nuts (crop group 14-12), fruit, small, vine climbing, except fuzzy kiwifruit (subgroup 13-07F) and potato vine desiccation.

NON-CROP USES

Bastnate controls annual and perennial weeds in non-crop areas defined below in the **"Where to Apply"** section. Applications may be made on a broadcast, banded or spot treatment basis depending on the situation. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat treatments may be necessary to control plants generating from underground parts or seed.

When to Apply

Bastnate is a foliar-active material. Best results are obtained when weeds are actively growing. Weed control may be

reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application of the highest rate directed. Bastnate must be applied at the labeled rate in the **“How to Apply”** section. Repeat applications of Bastnate or tank mixes of Bastnate plus one or more appropriate residual herbicide(s) listed on this label will be needed to control weeds emerging from underground parts or seeds.

Where to Apply

Trimming and Edging

Bastnate may be used for trimming and edging landscape areas including around individual trees and shrubs, landscape beds, foundations, fences, driveways, paths, and parking areas; also on golf courses along cart paths, around sign and light posts, and around sand traps. For control of weeds emerging from seed, the use of Bastnate in a tank mix with pre-emergence herbicides is advised. If spraying in areas adjacent to desirable plants, use a shield made of cardboard, plywood, or sheet metal while spraying to help prevent spray from contacting foliage of desirable plants. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

Conservation Reserve Program (CRP)[*]

This product can be used to control undesirable vegetation when rotating out of CRP acres or to suppress competitive growth and seed production of undesirable vegetation in CRP acres. For selective applications with broadcast spray equipment, apply 48 to 56 fl. oz./A (0.88 to 1.0 lb. ai/A) of this product in early spring before desirable CRP grasses, including crested and tall wheatgrass, break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy. Some stunting of CRP perennial grasses will occur if applications are made when plants are not dormant.

[*Not registered for use by California]

Wildlife Food Plots[*]

This product may be used as a site preparation treatment prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product, or native species may be allowed to repopulate the area. If tillage is needed to prepare a seedbed, wait 7 days after applying this product before tilling.

[*Not registered for use by California]

Farmsteads, Recreational and Public Areas

When applied as a spot or directed spray application, this product controls annual and perennial weeds listed on this label in areas including areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, roadsides, schools, parking lots, tank farms, pumping stations, and parks. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

Dormant Bermudagrass (Not for use on Residential Turf/Turfgrass/Lawns)

Bastnate may be used to control winter annual weeds in well-established ornamental dormant hybrid or common Bermudagrass. Apply only when the turf is fully dormant and prior to spring green-up or severe turfgrass injury or delayed green-up may occur. For best results, apply Bastnate at a rate of 40 – 80 fl. oz./A (0.73 – 1.46 lbs. a.i./A) after most weeds have germinated and are in an early growth stage. Refer to the Weeds Controlled by Bastnate section of this label for selecting specified rates. Applications of Bastnate may also be used to suppress or control undesirable biennial or perennial weeds. Avoid high volume and spot applications where spray volume exceeds 80 gallons per acre or injury or delayed green-up may occur.

Ornamentals and Christmas Trees

When applied as specified by this label, this product may be used for the control of undesirable vegetation in site preparation prior to planting, around and within shade and greenhouses, and as a directed spray around containers and field-grown established ornamentals and Christmas trees.

How to Mix

Bastnate must be mixed with water to make finished spray solution as follows:

Fill the spray tank with the required amount of water.

Add the proper amount of product, then mix thoroughly.

How to Apply

Spot or Directed Applications

This product may be used as a spot or directed spray application using 0.4 to 0.75 fl. oz./gal. of water (0.007 - 0.014 lb. a.i./gal. of water) depending upon the weed and stage of growth as shown in the following sections. Spray undesirable vegetation foliage on a spray-to-wet basis. Ensure uniform and complete coverage. Use a coarse spray. Backpack, pump-up, and hydraulic sprayers may be used. Thoroughly clean the sprayer following use.

Broadcast or Boom Applications

Apply 12 – 38 fl. oz./A (0.22 – 0.69 lb. a.i./A) depending upon the weed and stage of growth as shown in the following

sections. Use a minimum of 40 gallons of water per acre with a minimum of 30 PSI spray pressure.

Aerial Applications

Apply as a foliar treatment using a minimum of 5 gallons of water per acre to ensure thorough coverage. Applications under conditions which cause drift of this product will result in damage to any vegetation contacted. Drift control additives may be used. If a drift control additive is used, observe and follow all directions and precautions as specified on the additive label.

Tank Mix Directions for Non-crop Uses

Bastnate is compatible in tank mixes with many other herbicides including non-selective herbicides including glyphosate. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank mix applications of Bastnate plus the following herbicides are advised for broad-spectrum post-emergence and pre-emergence weed control:

Butroxydim	Isoxaben	Oxadiazon
Diglycolamine salt of 3,6-dichloro-o-anisic Acid	Norflurazon	Pendimethalin
Isopropylamine salt of imazapyr	Oryzalin	Prodiamine

A compatibility test must be conducted with any potential tank mix partner with Bastnate, except with any one of those listed above. Using a clear glass quart jar, conduct the test as described below:

Fill the jar three-quarters full with water.

Add the appropriate amount of herbicide in the following order: (a) dry flowable, (b) wettable powder, (c) aqueous suspensions, (d) flowables, (e) liquids and (f) solutions and emulsifiable or liquid concentrates. Shake or gently stir jar after each addition to thoroughly mix.

After adding all ingredients, let the mixture stand for 15 minutes and then look for separation, large flakes, precipitates, gels, and heavy oily film on the jar or other signs of incompatibility.

If the compatibility test shows signs of incompatibility, **DO NOT** tank mix the product tested with Bastnate.

For the Following Weeds Controlled by Bastnate Apply:

Spot Application:

Apply 0.75 fl. oz./gal. of water (0.014 lb. a.i./gal. of water) when the weed height or diameter is less than 6 inches. Apply 1.25 fl. oz./ gal. of water (0.023 lb. a.i./gal. of water) when the weed height or diameter is 6 inches or greater.

Broadcast Application:

Apply 40 fl. oz./A (0.73 lb. a.i./A) when the weed height or diameter is less than 6 inches. Apply 56 fl. oz./A (1.02 lb. a.i./A) when the weed height or diameter is 6 inches or greater.

Broadleaf Weeds		
Chickweed	Jimsonweed	Marestail
Clover	Kochia	Purslane
Common Cocklebur	London rocket	Shepherd's purse
Filaree	Malva (little mallow)	Smartweed
Grasses and Sedges		
Barnyardgrass	Green Foxtail	Stinkgrass
Cupgrass	Johnsongrass (rhizome)	Windgrass
Fall Panicum	Lovegrass	Yellow Foxtail
Giant Foxtail	Shattercane	
Goosegrass	Smallflower Alexandergrass (Signalgrass)	

For the Following Weeds Controlled by Bastnate Apply:

Spot Application:

Apply 1.25 fl. oz./gal. of water (0.023 lb. a.i./gal. of water) when the weed height or diameter is less than 6 inches. Apply 1.75 fl. oz./gal. of water (0.032 lb. a.i./gal. of water) when the weed height or diameter is 6 inches or greater.

Broadcast Application:

Apply 56 fl. oz./A (1.02 lbs. a.i./A) when the weed height or diameter is less than inches tall. Apply 80 fl. oz./A (1.46 lbs. a.i./A) when the weed height or diameter is 8 inches or greater.

Broadleaf Weeds		
Annual sowthistle	Lambsquarters	Tansy mustard
Bindweed	Leafy spurge	Velvetleaf
Buffalobur	Mugwort	Vervain
Burdock	Musk thistle	Virginia copperleaf
Canada thistle	Nettle	White heath aster

Curly dock	Nightshade	Wild buckwheat
Dandelion	Pennycress	Wild mustard
Dogbane (hemp)	Pigweed, redroot	Wild onion
Field growwell	Plantain	Wild rose
Fleabane	Prickly lettuce	Wild turnip
Goldenrod	Ragweed	Wood sorrel
Horsetail	Russian thistle	Yellow rocket
Grasses and Sedges		
Annual bluegrass	Downy brome	Ryegrass
Bahiagrass	Fescue	Sandbur
Barley	Guineagrass	Smooth brome
Bermudagrass	Kentucky bluegrass	Torpedograss
Carpetgrass	Nutsedge	Vaseygrass
Crabgrass	Paragrass	Wheat
Dallisgrass	Quackgrass	Wild oat

Additional Use Directions

Use higher rates within the directed rate range for plant sizes listed when vegetation cover is dense or when weeds are growing under stressed conditions including drought or when average temperatures are below 50°F.

The addition of 8.5 to 17 pounds of ammonium sulfate (spray grade) per 100 gallons of water (1 to 2% by weight) or 2 to 4 pounds of ammonium sulfate per acre may improve the level of weed control.

Use on Woody Species[*]

When applied as labeled, Bastnate will provide control, partial control, or suppression of certain perennial woody weed species. Apply 64 – 192 fl. oz./A (1.19 – 3.51 lbs. a.i./A). Use the higher specified rates per acre of this product when conditions are not optimum for spray penetration, including when vegetation growth is heavy or dense. Lower specified rates may be used when the target species is a conifer and when vegetation growth conditions allow for uniform spray coverage.

[*Not registered for use by California]

Blackberry	<i>Rubus</i> spp.	Poison ivy	<i>Toxicodendron radicans</i>
Deer brush	<i>Ceanothus integerrimus</i>	Poison oak	<i>Toxicodendron toxicarium</i>
Douglas fir	<i>Pseudotsuga menziesii</i>	Roundleaf greenbrier	<i>Smilax rotundifolia</i>
Gallberry	<i>Ilex</i> spp.	Salmonberry	<i>Rubus spectabilis</i>
Hazel	<i>Corylus</i> spp.	Sweet gum	<i>Liquidambar styraciflua</i>
Honeysuckle	<i>Lonicera</i> spp.	Sumac	<i>Rhus</i> spp.
Huckleberry	<i>Gaylussacia</i> spp.	Thimbleberry	<i>Rubus parviflorus</i>
Maple	<i>Acer</i> spp.	Trumpet creeper	<i>Campsis radicans</i>
Multiflora rose	<i>Rosa multiflora</i>	Vine maple	<i>Acer circinatum</i>
Oak	<i>Quercus</i> spp.	Western red cedar	<i>Thuja plicata</i>
Pine	<i>Pinus</i> spp.		

Directed Spray Application:

Bastnate may be applied as a directed spray to control in-row weeds in field-grown woody plants. Refer to the How to Apply section of this labeling for appropriate application rate to control specific weeds. This product may also be used between and around containers and in site preparation for new planting. For spot or directed-spray applications, mix Bastnate at 1.7 fl. oz. of product per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use. **DO NOT** make spot or directed-spray applications to tree or vine trunk as injury may occur.

Site Preparation Application:

This product may be used for pre-plant site preparation for the control of annual and perennial weeds listed on this label, in ornamental and Christmas tree plantings. Ornamentals and Christmas trees may be planted into the treated area after the restricted entry interval (REI) of 12 hours has elapsed. Refer to the How to Apply section of this labeling for appropriate application rates to control specific weeds.

Greenhouse and Shade House Applications:

Bastnate may be used to control weeds in greenhouses and shade-houses. Apply Bastnate as a directed spray, using large droplet and low-pressure type nozzles. Avoid drift and direct contact with desirable vegetation.

Non-Crop Use Restrictions:

- **DO NOT** apply more than 80 fl. oz./A (1.46 lbs. a.i./A) in a single application.
- **DO NOT** apply more than 240 fl. oz. (4.50 lbs. a.i./A) of this product per acre per year to non-crop areas except

on dormant bermudagrass.

- **DO NOT** make more than 3 applications per year.
- Applications must be made at least 14 days apart in non-crop areas.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation or injury may result.
- **DO NOT** allow grazing of vegetation treated with this product.
- For aerial applications, **DO NOT** apply when winds are gusty or under conditions which favor drift on to desirable vegetation.
- **DO NOT** apply Bastnate as an over-the-top broadcast spray in ornamentals and shade or Christmas trees.
- **DO NOT** use in greenhouses or shade houses containing edible crops.
- In greenhouses and shade houses, air circulation fans must be turned off during application.

Spot or Directed Use

- For spot applications **DO NOT** exceed 1.88 fl. oz. (0.0344 lb. a.i.) per 1000 square feet per application.
- For spot applications, **DO NOT** exceed 5.65 fl. oz. (0.103 lb. a.i.) per 1000 square feet per year.
- **DO NOT** make spot or directed-spray applications to tree or vine trunk as injury may occur.
- For spot or directed applications, **DO NOT** apply beyond runoff.
- For spot or directed applications, **DO NOT** spray during windy conditions.

Turf Use

- On dormant bermudagrass, **DO NOT** apply more than 80 fl. oz. (1.46 lbs. a.i./A) per acre per year.
- **DO NOT** make more than 2 applications per year on dormant bermudagrass.
- **DO NOT** apply to residential lawns.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

DO NOT use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well ventilated place. Storage temperature must not exceed 125°F. Protect against direct sunlight.

PESTICIDE DISPOSAL

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

CONTAINER HANDLING

[[Nonrefillable Plastic Containers (Capacity Equal to or Less Than 5 Gallons):] Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. **DO NOT** burn unless allowed by state and local ordinances.]

[[Nonrefillable Plastic Containers (Capacity Greater Than 5 Gallons):] Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. 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 formulation equipment or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. **DO NOT** burn unless allowed by state and local ordinances.]

[[Nonrefillable Plastic Containers (e.g., Intermediate Bulk Containers [IBC]) (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down):] Nonrefillable container. **DO NOT** reuse or refill this container. Clean container promptly after emptying the contents from this container into formulation equipment and before final disposal using the following pressure rinsing procedure: Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure spray duration and/or spray volume. If the manufacturer's instructions are not available pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain pour or pump rinsate into formulation equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.]

Seed Disposal: To dispose of out of date or otherwise unmarketable seed from plants which have been treated with this product, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop

may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial, incineration or landfill disposal.

LIMIT OF WARRANTY AND LIABILITY

To the extent consistent with applicable law, Rainbow Agrosiences, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESSED WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, tort or otherwise.

To the extent consistent with applicable law, buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of the Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, applications to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

To the extent consistent with applicable law, this Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

To the extent consistent with applicable law, upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

[EPA APPROVAL DATE]

{BASE LABEL}

GLUFOSINATE	GROUP	10	HERBICIDE
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Bastnate

[Alternate Brand Names: Trusinate, Prism Glufosinate 2.3, Prismatic Glufosinate 2.3]

ACTIVE INGREDIENT:	WT. BY %
Glufosinate ammonium*	24.5%**
OTHER INGREDIENTS	75.5%
TOTAL:	100.0%

*CAS Number 77182-82-2.

**Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15-20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none">Call a poison control center or doctor immediately for treatment advice.Have person sip a glass of water if able to swallow.DO NOT induce vomiting unless told to by a poison control center or doctor.DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">Take off contaminated clothing.Rinse skin immediately with plenty of water for 15-20 minutes.Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN <p>If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible followed by charcoal and sodium sulfate administration. For non-emergency information on this product, contact the National Pesticides Information Center (NPIC) at 1-800-858-7378. Monday through Friday, 8 AM to 12 PM PST. or at http://npic.orst.edu.</p>	
EMERGENCY NUMBERS <p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. IN CASE OF AN EMERGENCY INVOLVING THIS HERBICIDE PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL (800) 424-9300.</p>	

For Chemical Emergency:

Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING/AVISO

Causes substantial but temporary eye injury. Harmful if swallowed. Harmful if absorbed through skin. **DO NOT** get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. 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 use.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or to areas where surface water is present. **DO NOT** apply to intertidal areas below the mean high water mark. **DO NOT** contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate.

This pesticide is toxic to vascular plants and must be used strictly in accordance with the drift and runoff precautions on this label in order to minimize off-site exposures.

Under some conditions, this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, including no till, limited till and contour plowing. These methods also reduce pesticide run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands, etc., or on the downhill side of fields where run-off could occur to minimize water run-off is advised.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT use with or store near oxidizing agents since hazardous chemical reaction may occur.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

DO NOT use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well ventilated place. Storage temperature must not exceed 125°F. Protect against direct sunlight.

PESTICIDE DISPOSAL

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

CONTAINER HANDLING

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[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][.] [additional] [Precautionary Statements][.] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

Manufactured [for][by]:
Rainbow Agrosiences, LLC
535 E Plainfield Rd, Suite E
Willowbrook, IL 60527
{Note to reviewer: Lot or Batch number may appear on label or printed directly on packaging.}

EPA Reg. No.: 103591-XX
EPA Est.:
Net Contents:
[Lot/Batch code/number]

[EPA APPROVAL DATE]