UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 6, 2020

Travis Bui
Regulatory Product Manager
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419

Subject: Registration Review Label Mitigation for Primisulfuron- methyl
Product Name: Beacon Herbicide
EPA Registration Number: 100-705
Application Date: 12/18/2017
Decision Number: 546289

Dear Mr. Bui:

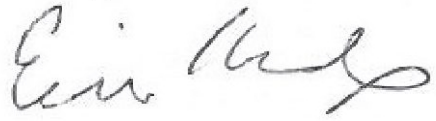
The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Primisulfuron- methyl Interim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

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

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

If you have any questions about this letter, please contact Erik Kraft by phone at 703-308-9358, or via email at Kraft.Erik@epa.gov.

Sincerely,



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

Enclosure

PRIMISULFURON-METHYL	GROUP	2	HERBICIDE

Beacon® Herbicide

For postemergence weed control in field corn (grown for grain, silage, or seed) and popcorn

Active Ingredient:	
Primisulfuron-methyl*:	75.0%
Other Ingredients:	25.0%
Total:	100.0%

*CAS No. 86209-51-0

Beacon Herbicide is formulated as a water-dispersible granule and contains 0.75 lb primisulfuron-methyl per lb of product.

KEEP OUT OF REACH OF CHILDREN.

CAUTION/PRECAUCIÓN

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

See additional precautionary statements and directions for use inside booklet.

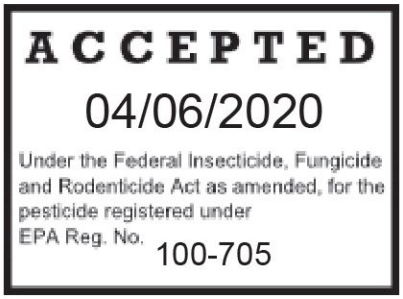
EPA Reg. No. 100-705
EPA Est.

This outer protective bag contains Beacon Herbicide in 5 small, inner water-soluble packets. Entire inner packets and contents dissolve in water. After opening outer bag, immediately dump the required number of unopened inner packets into the partially filled sprayer or mix tank. **DO NOT** excessively handle the soluble packets or expose them to moisture, because this may cause rupturing.

This product is filled by weight not by volume.

5 X 1.52 ounce
Water-Soluble Packets

7.6 ounces
Total Net Weight



FIRST AID	
If in eyes	• 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 inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing	• 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.
If swallowed	• 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOTLINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION/PRECAUCIÓN

Causes moderate eye irritation. Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants

- Waterproof gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils or Viton® ≥ 14 mils
- Shoes plus socks

User Safety Requirements

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

Engineering Controls

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607(d)]. Mixers and loaders handling this product while it is enclosed in intact water soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

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

For terrestrial uses: **DO NOT** apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment wash water or rinsate.

Groundwater Advisory

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

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of primisulfuron-methyl from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

Non-Target Organism Advisory

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. It is critical to avoid contaminating the forage sources and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the **Spray Drift Management** section of this label.

MANDATORY SPRAY DRIFT

Ground Boom Applications

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Aerial Applications

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size – Ground Boom

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

Controlling Droplet Size – Aircraft

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

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

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

WIND

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

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

WINDBLOWN SOIL PARTICLES ADVISORY

Beacon Herbicide has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affect the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying Beacon Herbicide if prevailing local conditions may be expected to result in off-site movement.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES**

OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitations of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

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

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

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

- Coveralls
- Waterproof gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils or Viton ≥ 14 mils
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

Observe all precautions and limitations on this label and on the labels of each product used in tank mixtures with this product.

PRODUCT INFORMATION

Beacon Herbicide is a selective herbicide applied after emergence of both crop and weeds for the control of shattercane, sorghum-almum, johnsongrass, quackgrass, and many broadleaf weeds in field corn grown for silage, grain, or seed and popcorn. Application may be made by ground or aerial equipment to young, actively growing weeds. Refer to Tables for lists of weeds controlled by Beacon Herbicide alone and in tank mix combinations.

The level of weed control following Beacon Herbicide application is dependent upon weed species, weed size at application, and growing conditions. Weed control is better when ample soil moisture exists before and after Beacon Herbicide application than when the soil is dry and weeds are under stress from lack of moisture.

Where reference is made to weeds partially controlled, partial control can mean either erratic control from good to poor or consistent control at a level below that generally considered acceptable for commercial weed control.

Growth of susceptible weeds is inhibited following application of Beacon Herbicide. The leaves turn yellow and/or red after several days followed by death of the growing point and complete plant death occurs 7-30 days after Beacon Herbicide application depending upon weed species and growing conditions. Weeds not completely killed by Beacon Herbicide are often stunted and are less competitive to corn. Beacon Herbicide reaching the soil during a postemergence application provides preemergence control of certain weed species.

Beacon Herbicide application at labeled rates rarely causes corn injury. When injury occurs, it is generally of short duration and yields are not affected.

WEED RESISTANCE MANAGEMENT

PRIMISULFURON-METHYL	GROUP	2	HERBICIDE

To reduce the potential for herbicide resistance issues, the end use product, Beacon Herbicide, label contains the following label language that provides the user with information on resistant weed management.

Beacon Herbicide is a Group 2 herbicide (acetolactate synthase (ALS)-inhibitor mode of action). Some naturally occurring weed populations have been identified as resistant to herbicides with the ALS-inhibitor mode of action. Selection of resistant biotypes, through repeated use of these herbicides or lower than specified use rates in the same field, may result in weed control failures. A resistant biotype may be present if poor performance cannot be attributed to adverse environmental conditions or improper application methods.

Principles of Herbicide Resistant Weed Management

Scout and know your field

- Know weed species present in the field to be treated through scouting and field history. An understanding of weed biology is useful in designing a resistance management strategy. Ensure the weed management program will control all weeds present.
- Fields should be scouted prior to application to determine species present and growth stage. Always apply this herbicide at the full labeled rate and correct timing for the weeds present in the field.

Utilize non-herbicidal practices to add diversity

- Use diversified management tactics including cover crops, mechanical weed control, harvest weed seed control, and crop rotation as appropriate.

Use good agronomic practices, start clean and stay clean

- Use good agronomic practices that enhance crop competitiveness.
- Plant into weed-free fields utilizing tillage or an effective burndown herbicide for control of emerged weeds.
- Sanitize farm equipment to avoid spreading seed or vegetative propagules prior to leaving fields.

Difficult to control weeds

- Fields with difficult to control weeds should be planted in rotation with crops that allow the use of herbicides with an alternative mode of action or different management practices.
- Difficult to control weeds may require sequential applications, including a broad spectrum preemergence herbicide followed by one or more postemergence herbicide applications. Utilize herbicides containing different modes of action effective on the target weeds in sequential applications.

DO NOT overuse the technology

- **DO NOT** use more than two applications of this or any other herbicide with the same mode of action in a single growing season unless mixed with an herbicide with a different mode of action which provides overlapping spectrum for the difficult to control weeds.

Scout and inspect fields following application

- Prevent an influx of weeds into the field by controlling weeds in field borders.

- Scout fields 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.
- Report non-performance of this product to your Syngenta retailer, Syngenta representative, or call 1-866-Syngent (866-796-4368). If resistance is suspected ensure weed escapes are controlled using an herbicide with an effective mode of action and/or use non-chemical means to prevent further seed production.

Prevent weed escapes before, during, and after harvest

- **DO NOT** allow weed escapes to produce seed or vegetative structures including tubers or stolons which contribute to spread and survival. Consider harvest weed seed management and control weeds post-harvest to prevent seed production.

Resistant weeds

- Contact your local Syngenta representative, retailer, crop advisor or extension agent to determine if weeds resistant to this mode of action are present in your area. If resistant biotypes have been reported, use the full labeled rate of this product, apply at the labeled timing, and tank-mix with a different mode of action product so there are multiple effective modes of application for each suspected resistant weed.

USE PRECAUTIONS

Follow the precautions listed below to reduce chances for crop injury and/or to avoid reduced weed control:

1. Field Corn: Apply either a single postemergence Beacon Herbicide application at the standard use rate (0.76 oz/A or 0.0356 lb ai/A) or the initial application of a split postemergence application (2 applications of 0.38 oz/A or 0.0178 lb ai/A) over-the-top directed or semi-directed when free-standing field corn height is between 4 and 20 inches. Corn plants less than 4 inches tall may be more susceptible to injury. The second Beacon Herbicide application of the split must be applied directed with drop nozzles when corn is between 20 inches tall and before tassel emergence.

2. If irrigation is necessary following application, delay for 24 hours to minimize potential injury, particularly on coarse-textured soils.

3. a. If a corn hybrid (not a Clearfield® hybrid) is planted and an organophosphate insecticide is applied at planting or before applying Beacon Herbicide, temporary injury may occur following the Beacon Herbicide application. Application of Beacon Herbicide to corn previously treated with labeled rates of Counter® CR applied in a surface band or T-band (in front of press wheel) at planting time, may result in crop injury. Syngenta will not be held responsible for losses or damage resulting from such use.

   b. If a Clearfield corn hybrid is planted, organophosphate insecticides can be applied at any time according to label directions without increasing the likelihood of injury to those hybrids. **Note:** The interaction between organophosphate insecticides and Beacon Herbicide is completely overcome by Clearfield corn hybrids.

4. Beacon Herbicide may be applied to all field corn hybrids except the few that are classified by Syngenta as potentially susceptible to injury following Beacon Herbicide application. Consult your chemical dealer, seed supplier, or Syngenta representative for a current listing of field corn hybrids classified as “potentially susceptible” to Beacon Herbicide.

   Popcorn and Seed Corn: Beacon Herbicide can be applied directed or semi-directed to popcorn and inbred lines of field corn; however, all inbred lines and all popcorn hybrids have not been tested for sensitivity to Beacon Herbicide nor does Syngenta have access to all seed company data. Thoroughly test inbred lines and popcorn hybrids for sensitivity to Beacon Herbicide before treating large acreages. Crop injury may occur to popcorn and inbred lines if over-the-top applications of Beacon Herbicide are made when the popcorn of inbred plants are between 10 and 48 inches tall, and before tassel emergence.

5. Aphids or other insects infesting johnsongrass may move to the corn crop following control of the johnsongrass with Beacon Herbicide. The insects may transmit viral diseases to the corn resulting in corn stunting, leaf discoloration, and yield loss. Virus-resistant corn hybrids and/or control of the insects may be used to reduce the likelihood of disease development.

6. Crop competition with the weeds is particularly important for year-long control of target grasses. Some regrowth may occur where the corn crop is not competitive. Best performance can be obtained by following weed height and application directions listed later in this label.

7. Decaying johnsongrass rhizomes have been shown to release compounds which can stunt corn. The potential for corn stunting may be reduced if rhizome masses are broken up through tillage prior to planting corn.

8. Observe all precautions and limitations on the label of each product used in tank mixtures with Beacon Herbicide.

USE RESTRICTIONS

1. **DO NOT** apply Beacon Herbicide to a non-Clearfield corn hybrid that was previously treated or Counter CR® applied in-furrow at planting or over the row at cultivation, as severe crop injury may occur.

2. **DO NOT** make a foliar postemergence or soil application of any organophosphate insecticide within 10 days before or 7 days after a Beacon Herbicide application, or severe crop injury may occur.

3. **DO NOT** use Beacon Herbicide on sweet corn or ornamental (Indian) corn.

4. **DO NOT** irrigate within 4 hours after Beacon Herbicide application. Rainfall occurring within 4 hours after Beacon Herbicide application may reduce weed control.

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

6. **DO NOT** apply Beacon Herbicide by aerial application in New York State.

7. **DO NOT** apply Beacon Herbicide if corn shows severe stress or injury due to drought, cold weather, hail, flooding compacted soil, saturated soil conditions, disease, insect damage, nutrient deficiency, previously applied herbicides or other causes.

APPLICATION PROCEDURES

Ground Application Equipment: Use stainless steel, aluminum, fiberglass, or polyethylene spray tanks. Spray nozzles must be uniformly spaced and of the same size, and must provide accurate and uniform application.

To help assure accuracy, calibrate sprayer at the beginning of the year before use and recalibrate frequently, especially when changing carriers. For ground application, use a minimum of 10 gal of water per acre. Using higher volumes (e.g., at least 20 gal/A) for severe weed infestations ensures adequate spray coverage. Always include crop oil concentrate or nonionic surfactant in the spray mixture (see **Mixing Instructions** section which follows).

Use a pump with capacity to: (1) maintain 35-40 psi pressure at nozzles, and (2) provide sufficient agitation within the tank to keep product in suspension. Lower pressures may be used with extended range or low pressure nozzles. A centrifugal pump which provides propeller shear action for dispersing and mixing the product is advised. Use a pump that provides a minimum of 20 gal/minute/100 gal tank size circulated through correctly positioned sparger tubes or jet agitators. Agitation during both mixing and application is essential. Use screens to protect the pump and to prevent nozzles from clogging. Use 16-mesh or coarser screens placed on the suction side of the pump. Screens must not be placed in the recirculation line. Use 50-mesh or coarser screens between the pump and boom, and when required, at the nozzles. Check nozzle manufacturer's specifications

Good weed coverage with the spray mixture is essential for optimum weed control results. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid any spray application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Allow adequate distance between target area and desirable vegetation to prevent drift to nontarget areas.

DO NOT apply Beacon Herbicide as a band application directly over the corn rows. Beacon Herbicide must be applied postemergence over-the-top, directed, or semi-directed. If the corn canopy would prevent adequate weed coverage, apply Beacon Herbicide directed or semi-directed with drop nozzles even if the corn height is less than 20 inches. Beacon Herbicide must be applied directed with drop nozzles when corn is between 20 inches tall and before tassel emergence.

Aerial Application: Apply Beacon Herbicide in water using a minimum spray volume of 3 gal/A. Include a nonionic surfactant, at 1 qt/100 gal of spray mix (0.25% volume/volume) or a good quality crop oil concentrate at no more than 2 pt/A. (See following **Mixing Instructions**.) Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Drift from aerial applications of the herbicide is likely to result in damage to sensitive plants adjacent to the treatment site. This damage can occur at levels below the concentrations that can be detected with chemical analysis.
Avoid application to humans or animals. Flagmen and loaders must avoid inhalation of spray mist and prolonged contact with skin.

Avoid all direct or indirect contact (including spray drift) of Beacon Herbicide with crops other than those advised for treatment on this label, since injury may occur.

HANDLING AND MIXING PROCEDURES

Instructions for Using Water Soluble Packages Directly into Spray Tanks

Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

Handling Instructions

Follow these steps when handling pesticide products in WSPs.

1. Mix in spray tank only.

2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.

3. Keep the WSP(s) in outer packaging until just before use.

4. Keep the WSP dry prior to adding to the spray tank.

5. Handle with dry gloves and according to the label instructions for PPE.

6. Keep WSP intact. **DO NOT** cut or puncture WSP.

7. Reseal the WSP outer packaging to protect any unused WSP(s).

Mixing Instructions

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. **DO NOT** tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.

2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.

3. Stop adding water and stop any agitation.

4. Place intact/unopened WSP(s) into the tank.

5. **DO NOT** spray water from a hose or fill pipe to break or dissolve the WSP(s).

6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.

7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.

8. Stop agitation before tank lid is opened.

9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.

10. **DO NOT** add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.

11. While maintaining agitation, continue filling the spray tank. When the tank is ¾ full, add any tank mix partners. Add any water-dispersible granule or other dry formulations first, and allow material to disperse. Then add any emulsifiable liquid formulation.

12. Follow by adding either (a) a nonionic surfactant with a minimum of 80% of the constituents effective as a spray adjuvant at the rate of 1 qt/100 gal of spray volume (0.25% volume/volume) or (b) a petroleum- or vegetable-based crop oil concentrate containing not less than 12% emulsifier at % v/v as specified on the oil adjuvant label. If oil adjuvant is added, use ≤ 2.5% volume/volume concentration of the oil adjuvant. In addition to crop oil concentrate or nonionic surfactant, liquid nitrogen fertilizer (28-34% nitrogen-ammonium form) may also be added at 2-4 qt/A. Instead of the liquid nitrogen fertilizer, spray grade ammonium sulfate may be used at the rate of 2-4 lb/A. Liquid nitrogen fertilizers or ammonium sulfate must not be used as a substitute for crop oil concentrate or nonionic surfactant in the spray mixture. **DO NOT use liquid fertilizer as the spray carrier**.

13. If AAtrex® (atrazine), Accent®, Banvel®, Buctril®, Buctril + atrazine, Clarity®, Marksman®, Resource®, or 2,4-D is desired as a tank mix partner, add it next while continuing to agitate. When Beacon Herbicide is used alone or tank mixed with AAtrex (atrazine) or Accent, either crop oil concentrate or a nonionic surfactant must be included, with or without liquid nitrogen fertilizer or ammonium sulfate, as described in item 12 above. If Beacon Herbicide is tank mixed with Resource, crop oil concentrate is the advised adjuvant at 1% v/v.The addition of liquid nitrogen fertilizer to the Beacon Herbicide plus Resource tank mix can enhance the weed control under dry weather conditions but may also increase the risk of crop injury (i.e., foliar burn). In dry areas, crop oil concentrate is advised

instead of nonionic surfactant. **DO NOT** use crop oil concentrate as the spray adjuvant when using tank mixtures with Banvel (more than 2 oz/A), Buctril, Buctril + atrazine, Clarity (more than 2 oz/A), Marksman, or 2,4-D, i.e., use a nonionic surfactant as the additive in tank mixtures containing those products. **DO NOT** add liquid nitrogen when using Buctril, Buctril + atrazine or 2,4-D tank mixtures.

14. Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.

15. Use the spray solution when mixing is complete.

16. Maintain agitation of the diluted pesticide mix during transport and application.

17. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.

SPRAY EQUIPMENT

Cleaning Equipment after Beacon Herbicide Application

Because most crops other than corn are extremely sensitive to low rates of Beacon Herbicide, special attention must be given to cleaning equipment before spraying a crop other than corn. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using this procedure:

1. Flush tank, hoses, boom, and nozzles with clean water.

2. Prepare a cleaning solution of 1 gal of household ammonia per 50 gal of water. Many commercial spray tank cleaners may be used. Please request and read a copy of the Syngenta brochure “Clean It Up! A Guide to Cleaning Your Sprayers” (SCP 175-00103-D 2/01) from your local Syngenta representative for more information about proper tank cleaning procedures. **DO NOT** use chlorine-based cleaners.

3. Use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. If pressure washer is not available, completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.

4. Flush hoses, spray lines, and nozzles for at least one minute with the cleaning solution.

5. Dispose of rinsate from steps 1-3 in an appropriate manner. Spray the cleaning solution on untreated corn or return to a rinsate tank for later use as make-up for spraying corn or use other approved disposal.

6. Repeat steps 2-5.

7. Remove nozzles, screens, and strainers and clean separately in the ammonia solution after completing the above procedures.

8. Rinse the complete spraying system with clean water.

   Note: If the tank is equipped with the proper number of correctly mounted 360° tank washing nozzles which are attached to a dedicated rinsing system, less cleaning solution than a full tank may be used. Use sufficient cleaning solution to thoroughly rinse all surfaces. Start the sprayer agitation and recirculate the cleaning solution for at least 15 minutes. Flush the spray boom with the cleaning solution. Repeat the rinsing procedure 1-2 times.

BEACON HERBICIDE APPLIED ALONE

Grass and broadleaf weeds which are controlled following postemergence application of a full (0.76 oz/A or 0.0356 lb ai/A) rate of Beacon Herbicide are listed in Tables 1 and 2. If weeds other than those listed in Tables 1 and 2 are anticipated, apply an appropriately labeled preplant, preemergence, or postemergence herbicide or herbicide combination. Dual II Magnum®, Bicep II Magnum®, Bicep Lite II®, Bicep Lite II Magnum®, Dual II Magnum + AAtrex are examples of herbicide treatments that can precede Beacon Herbicide application. Consult their respective labels for directions, precautions, and limitations before applying.

Beacon Herbicide is packaged in water-soluble packets. One packet treats 2 acres at the standard use rate of Beacon Herbicide at 0.76 oz/A or 0.0356 lb ai/A). Apply a single application of Beacon Herbicide at the standard use rate plus spray adjuvant postemergence over-the-top, directed, or semi-directed when weed(s) are within the height range specified for optimum control in Tables 1 and 2 and when the free-standing height of the field corn is between 4 and 20 inches (minimum of 10 inches and only directed applications for inbred lines and popcorn). Complete weed coverage is essential for optimum effectiveness of Beacon Herbicide. To ensure good spray coverage of the weeds and avoid potential crop injury, applications made after field corn is 20 inches tall (or exhibits more than 6 collars; V6, whichever comes first) must be directed or semi-directed. Use drop nozzles for directed or semi-directed applications.

Seed Corn and Popcorn: Refer to Precaution 6 for application timing and other information.

Cultivation or split application of the standard use rate is advised to control reinfestation that may occur from regrowth or late germination of weeds and to improve weed control

under dry conditions. A waiting period of 7 days after Beacon Herbicide application is advised before making a cultivation or weed control may be reduced. Where shattercane is the target weed species, Beacon Herbicide may be applied at cultivation, but some regrowth of shattercane may occur. Apply Beacon Herbicide ahead of cultivators; **DO NOT** cultivate and then apply Beacon Herbicide.

For optimum control of johnsongrass, cultivation or split application of the standard use rate (2 applications of 0.38 oz/A or 0.0178 lb ai/A) is advised to control reinfestation that may occur from regrowth. Alternatively, apply 0.5 oz/A (0.0234 lb ai/A) (3 acres/packet) at the first application, followed by an application of 0.25 oz/A (0.0117 lb ai/A) (6 acres/packet) to control regrowth. Apply the initial application of the split when the weed height is within the range specified for optimum control in Table 1 and when the free-standing field corn height is between 4 and 20 inches. Apply the second application of the split when the new weed growth is within the height range for optimum control listed in Table 1 and before tassel emergence.

After several years use of Beacon Herbicide or other products for johnsongrass or shattercane control, stands of these weeds may be substantially reduced. In fields with only seedling johnsongrass or with light populations of shattercane, use a split application of Beacon Herbicide by applying 0.5 oz/A (0.0234 lb ai/A) (3 acres/packet) of Beacon Herbicide. Follow with a second application of 0.25 oz/A (0.0117 lb ai/A) (6 acres/packet) to control rhizome johnsongrass or any shattercane which may germinate in later flushes.

The number of packets required to treat various acreages with a single or split Beacon Herbicide application is listed in Table 4.

Use Restrictions:

1. **DO NOT** apply more than 0.76 oz of Beacon Herbicide per acre (0.0356 lb ai/A) in a single application.

2. **DO NOT** apply more than 0.76 oz of Beacon Herbicide per acre per year (0.0356 lb primisulfuron-methyl per acre per year).

3. **DO NOT** make more than two applications per year when using reduced rates.

4. Minimum Re-treatment Interval- 21 days

5. **DO NOT** graze or feed forage from Beacon Herbicide-treated corn to livestock within 30 days after application.

6. **DO NOT** harvest for silage within 45 days after application.

7. **DO NOT** harvest grain with 60 days after application.

8. Complete all Beacon Herbicide application to corn before tassel emergence.

9. **DO NOT** use in the Red River Valley areas of Minnesota or North Dakota or areas with the same soil type or parent material of the Red River Valley, unless corn will be the only crop grown in the following 2 years.

Table 1: Grass Weed Species Controlled with Beacon Herbicide

Grass Weed Species	Weed Height Range for Optimum Control (inches)
Foxtails (*Setaria* spp.)***, ****	1-2
Johnsongrass, Rhizome (*Sorghum halepense*)*, ****	8-16
Johnsongrass, Seedling (*Sorghum halepense*)****	4-12
Nutsedge, Yellow (*Cyperus esculentus*)***	1-4
Panicum, Fall (*Panicum dichotomiflorum*)	Less than 2
Quackgrass (*Elytrigia repens*)** (formerly *Agropyron repens*)	4-8
Ryegrass, Annual (*Lolium multiflorum*)	1-4
Sandbur (*Cenchrus* spp.)***	1-4
Shattercane (*Sorghum bicolor*)****	4-12
Sorghum-almum (*Sorghum almum*)	4-12
Sorghum, Volunteer (*Sorghum bicolor*)	4-12

*Regrowth may occur. Control unacceptable regrowth with cultivation or the split application as described above.

**Control of quackgrass is slower compared to other grass weed species.

***Partial control/suppression. Control is most effective under conditions favorable for weed growth (i.e., adequate moisture, optimum temperature conditions). If the weeds are subject to stress conditions (i.e., drought, cold temperatures, etc.), or are not actively growing, Beacon Herbicide will not provide acceptable control. Some other means of control must be used if infestations are severe.

****Certain biotypes of this weed species are known to be resistant to this and other ALS herbicides. Where these ALS-resistant biotypes are known to exist, an appropriate registered herbicide, active against that weed and with another mode of action, must be used alone or in tank mixture with Beacon Herbicide to control these biotypes.

Table 2: Broadleaf Weed Species Controlled with Beacon Herbicide Applied at 0.76 oz/A (0.0356 lb ai/A)

Broadleaf Weed Species	Weed Height Range for Optimum Control (inches)
Alfalfa (*Medicago sativa*)*	Less than 1.5
Artichoke, Jerusalem (*Helianthus tuberosus*) Beggarweed, Florida (*Desmodium tortuosum*) Burcucumber (*Sicyos angulatus*) Cocklebur, Common (*Xanthium strumarium*)**	1-4

Devilsclaw (*Proboscidea louisianica*)	
Horsenettle (*Solanum carolinense*)* Horseweed (Marestail, *Conyza canadensis*)*	2-9
Jimsonweed (*Datura stramonium*) Kochia (*Kochia scoparia*)** Ladysthumb (*Polygonum persicaria*)	1-4
Lambsquarters, Common (*Chenopodium album*)* Morningglory (*Ipomoea* spp.)*	Less than 1.5
Mustard, Wild (*Brassica kaber*) Nightshade, Black (*Solanum nigrum*) Nightshade, Eastern Black (*Solanum ptycanthum*) Nightshade, Hairy (*Solanum sarrachoides*) Pigweeds (*Amaranthus* spp.)** Puncturevine (*Tribulus terrestris*) Radish, Wild (*Raphanus raphanistrum*)	1-4
Ragweed, Common (*Ambrosia artemisiifolia*) Ragweed, Giant (*Ambrosia trifida*)	2-9
Sesbania (*Sesbania exaltata*)	1-4
Sicklepod (*Cassia obtusifolia*)	Less than 1.5
Sida, Prickly (*Sida spinosa*) Smartweed, Pennsylvania (*Polygonum pensylvanicum*)	1-4
Sunflowers (*Helianthus* spp.)** Thistle, Canada (*Cirsium arvense*)*	2-9
Thistle, Russian (*Salsola iberica*)*, ** Velvetleaf (*Abutilon theophrasti*)***	1-4

*Partial control/suppression

**Certain biotypes of this weed species are known to be resistant to this and other ALS herbicides. Where these ALS-resistant biotypes are known to exist, an appropriate registered herbicide, active against that weed and with another mode of action, must be used alone or in tank mixture with Beacon Herbicide to control those biotypes.

***Crop oil concentrate plus liquid nitrogen fertilizer or ammonium sulfate are advised as spray adjuvants (refer to **Mixing Instructions**).

Beacon Herbicide applied at 0.38 oz/A (0.0178 lb ai/A) (4 acres/packet) will control the broadleaf weeds listed in Table 3 when applied at the specified heights. Additionally, Beacon Herbicide applied at 0.38 oz/A (0.0178 lb ai/A) alone or in tank mixtures will provide partial control/suppression of 4 to 12-inch shattercane, sorghum-almum, and seedling johnsongrass under conditions favorable for weed growth (i.e., adequate moisture, no excessively cool temperatures, etc.). If residual control of the broadleaf weed species is desired, or if prevailing weather or soil conditions (cold temperatures, drought, etc.) are not favorable for weed growth, use Beacon Herbicide at the rates listed in Table 2, or in combination with other broadleaf herbicides as described in the **Beacon Herbicide Tank Mix Combinations for Weed Control** in Corn section.

Table 3: Broadleaf Weed Species Controlled with Beacon Herbicide Applied Alone at 0.38 oz/A* (0.0178 lb ai/A)

Broadleaf Weed Species	Weed Height Range for Optimum Control (inches)
Cocklebur, Common (*Xanthium strumarium*)	1-4
Jimsonweed (*Datura stramonium*)	1-4
Nightshade, Eastern Black (*Solanum ptycanthum*)	1-4
Pigweed, Redroot (*Amaranthus retroflexus*)	1-3
Pigweed, Smooth (*Amaranthus hybridus*)	1-3
Ragweed, Common (*Ambrosia artemisiifolia*)	2-6
Ragweed, Giant (*Ambrosia trifida*)	2-6
Smartweed, Pennsylvania (*Polygonum pensylvanicum*)	1-2
Sunflowers (*Helianthus* spp.)	2-6

*If residual control is desired, or if conditions are unfavorable for weed growth (i.e., drought, cool temperatures), use the 0.76 oz/A (0.0356 lb ai/A) (2 acres/packet) rate of Beacon Herbicide.

Table 4: Number of Beacon Herbicide Water-Soluble Packets Required to Treat Various Acreages with a Single or Split Application of the Standard Use Rate

Number of Acres to Treat	Number of Water-Soluble Packets		
		Split Application	
	Single Application	1st Application	2nd Application
2	1 packet	—	—
4	2 packets	1 packet	1 packet
6	3 packets	—	—
8	4 packets	2 packets	2 packets
10	5 packets (1 bag)	—	—
12	6 packets	3 packets	3 packets
14	7 packets	—	—
16	8 packets	4 packets	4 packets
18	9 packets	—	—
20	10 packets (2 bags)	5 packets (1 bag)	5 packets (1 bag)

1 bag contains 5 packets.

BEACON HERBICIDE TANK–MIX COMBINATIONS FOR WEED CONTROL IN CORN

Beacon Herbicide may be applied postemergence in tank mix combinations for improved control of various weeds. For all tank mixtures of Beacon Herbicide with other herbicides, refer to both labels for weeds controlled and application information.

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.

Precautions for Tank Mix Combinations: (1) Beacon Herbicide applied alone or in tank mixtures with AAtrex/atrazine or Accent can be applied using either a nonionic surfactant or crop oil concentrate with or without liquid nitrogen or ammonium sulfate. Refer to item 12 under **Mixing Instructions** for information on rates of the various additives. (2) In mixtures with Banvel (more than 2 oz/A), Buctril, Buctril + atrazine, Clarity (more than 2 oz/A), Marksman, or 2,4-D, use only a nonionic surfactant with a minimum of 80% of the constituents effective as a spray adjuvant at the rate of 1 qt/100 gal of spray volume (0.25% volume/volume). Liquid nitrogen must not be added when using Buctril, Buctril + atrazine, or 2,4-D tank mixtures. 3) Syngenta does not advise tank mixtures of Beacon Herbicide with other agricultural products not listed on this label due to the possibility of reduced control, crop injury, or other undesirable interactions. If Beacon Herbicide is applied in tank mixtures with other products, follow the most restrictive labeling requirements.

Beacon Standard Rate (0.76 oz/A) (0.0356 lb ai/A) (2 acres/packet) Tank Mixtures

For postemergence control of weeds not controlled by Beacon Herbicide used alone, tank mixtures with AAtrex (atrazine), Accent, Banvel (dicamba), Buctril (bromoxynil), Buctril + atrazine, Clarity, Marksman, or 2,4-D may be used to increase the spectrum of control. When used in tank mixtures with these herbicides, apply Beacon Herbicide as specified in this label and use the tank mix partner as directed on its label.

Beacon Reduced Rate (0.38 oz/A) 0.0178 lb ai/A) (4 acres/packet) Tank Mixtures

For postemergence control of weeds in corn, Beacon Herbicide applied at 0.38 oz/A (0.0178 lb ai/A) will control/suppress the weeds listed in:

- Table 5 when tank mixed with AAtrex (atrazine)
- Table 6 when tank mixed with Accent
- Table 7 when tank mixed with Banvel or Clarity
- Table 8 when tank mixed with Buctril
- Table 9 when tank mixed with 2,4-D
- Table 10 when tank mixed with Resource

Apply to actively growing weeds at application . If weeds exceed the heights listed in Tables 5-10, use either the standard 0.76 oz/A (0.0356 lb ai/A) rate of Beacon Herbicide alone, a tank mixture with the full rate of the tank mix partner, or utilize another solution.

In addition to the tank mixtures described in Tables 5-10, Beacon Herbicide at 0.38 oz/A (0.0178 lb ai/A) may be tank mixed with Buctril + atrazine or Marksman. Apply mixtures with Buctril + atrazine when the corn is 4-12 inches tall and Marksman when the corn is 4-8 inches tall or through the 5-leaf stage, whichever comes first. Refer to Table 3 of this label and the paragraph preceding that table, as well as the label of the mixing partner, for information on weeds controlled and optimum weed heights. Under favorable growing conditions, these mixtures can prove particularly useful for managing light infestations of shattercane along with various broadleaf weeds.

With all tank mixtures containing atrazine, application must be made before the corn exceeds 12 inches in height; and the total atrazine applied may not exceed 2.5 lb ai/A per calendar year. Control of relatively large cocklebur, sunflower, and velvetleaf may be antagonized somewhat by tank mixtures of Beacon Herbicide with atrazine containing products.

For all Beacon reduced rate tank mixtures, apply a preemergence herbicide (including Dual II Magnum, Bicep II Magnum, Bicep Lite II Magnum, Dual II

Magnum + AAtrex) for grass control, and improved control of several of the weeds listed in Tables 5-10.

Table 5: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon at 0.38 oz/A (0.0178 lb ai/A) with AAtrex (Atrazine)

Broadleaf Weed Species	Weed Height Range for Optimum Control (inches)
Cocklebur, Common	1-4
Jimsonweed	1-4
Kochia	1-4
Lambsquarters, Common	1-5
Morningglories	1-4
Nightshade, Eastern Black	1-4
Pigweed, Redroot	1-5
Pigweed, Smooth	1-4
Ragweed, Common	2-6
Smartweed, Pennsylvania	1-4
Sunflowers	2-6
Velvetleaf	1-3

Table 6: Weeds Controlled or Suppressed with Tank Mixtures of Beacon Herbicide at 0.38 oz/A (0.0178 lb ai/A) with Accent

Weed Species	Weed Height Range for Optimum Control (inches)
Barnyardgrass	1-4
Burcucumber	1-4
Cocklebur, Common	1-4
Cupgrass, Woolly****	1-3
Foxtails, Giant	1-4
Foxtails, Green	1-4
Foxtails, Yellow	1-4
Horsenettle	2-6
Jimsonweed	1-4
Johnsongrass, Rhizome	8-16
Johnsongrass, Seedling	4-12
Lambsquarters, Common**	1-3
Millet, Wild Proso****	1-4
Morningglories***	1-2
Nightshade, Eastern Black	1-4
Oats, Wild	1-4
Panicum, Fall	1-4
Panicum, Texas	1-4
Pigweed, Redroot	1-5
Pigweed, Smooth	1-4
Quackgrass	4-8
Ragweed, Common	2-6
Ragweed, Giant	2-6
Shattercane	4-12
Signalgrass, Broadleaf	1-3
Smartweed, Pennsylvania	1-4
Sorghum, Volunteer	4-12
Sunflowers	2-6
Velvetleaf*	1-4

*Crop oil concentrate plus liquid nitrogen fertilizer or ammonium sulfate are advised as spray adjuvants (refer to **Mixing Instructions**).

**Partial control/suppression: Banvel can be added to this mixture for improved control of this weed. If ⅛ pt/A of Banvel or Clarity is used, of crop oil concentrate, with or without nitrogen, may be used in place of nonionic surfactant, for improved broadleaf weed control. Use only nonionic surfactant with tank mixtures containing more than ⅛ pt/A of Banvel or Clarity to avoid crop injury.

***Partial control/suppression: Atrazine can be added to this mixture for improved control of this weed.

****Partial control/suppression: Accent can be added to this mixture for improved control of these weeds.

Table 7: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon Herbicide at 0.38 oz/A (0.0178 lb ai/A) with Banvel or Clarity*

Broadleaf Weed Species		Weed Height Range for Optimum Control (inches)
Bindweed, Hedge		1 – 8
Burcucumber		1 – 4
Cocklebur, Common		1 – 4
Dogbane, Hemp**		2 – 6
Horsenettle		2 – 6
Ivy, Poison**		1 – 3
Jimsonweed		1 – 4
Kochia		1 – 4
Ladysthumb		1 – 4
Lambsquarters, Common		1 – 3
Nightshade, Black		1 – 4
Nightshade, Eastern Black		1 – 4
Pigweeds		1 – 5
Pokeweed**		2 – 6
Ragweed, Common		2 – 6
Ragweed, Giant		2 – 6
Sunflower, Common		2 – 10
Smartweed, Pennsylvania		1 – 4
Thistle, Canada		1 – 8
Velvetleaf		1 - 4

*Best control is obtained if weeds are at the listed heights at application. **Partial control/suppression

Table 8: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon Herbicide at 0.38 oz/A (0.0178 lb ai/A) with Buctril*

Broadleaf Weed Species		Weed Height Range for Optimum Control (inches)
Burcucumber		1 – 3
Cocklebur, Common		1 – 4
Jimsonweed		1 – 4
Ladysthumb		1 – 4
Lambsquarters, Common		1 – 8
Nightshade, Black		1 – 4
Nightshade, Eastern Black		1 – 4
Pigweeds		1 – 5
Ragweed, Common		2 – 10
Ragweed, Giant		2 – 6
Smartweed, Pennsylvania		1 – 4
Sunflower, Common		2 – 6
Velvetleaf		1 – 4

*Best control is obtained if weeds are at the listed heights at application.

Table 9: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon Herbicide at 0.38 oz/A (0.0178 lb ai/A) with 2,4-D*

Broadleaf Weed Species		Weed Height Range for Optimum Control (inches)
Burcucumber		1 – 3
Cocklebur, Common		1 – 4
Dogbane, Hemp***		2 – 6
Ivy, Poison***		1 – 3
Jimsonweed		1 – 4
Ladysthumb		1 – 4
Lambsquarters, Common		1 – 3
Milkweed, Common***		1 – 3
Milkweed, Honeyvine***		1 – 3
Nightshade, Black		1 – 4
Nightshade, Eastern Black		1 – 4
Pigweeds		1 – 5
Pokeweed***		2 – 6
Ragweed, Common		2 – 6
Ragweed, Giant		2 – 6
Smartweed, Pennsylvania		1 – 4
Sunflower, Common		2 – 10
Thistle, Canada		1 – 3
Velvetleaf		1 - 4

*Best control is obtained if weeds are at the listed heights at application.
***Partial control/suppression

Table 10: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon Herbicide at 0.38 oz/A (0.0178 lb ai/A) with Resource *

Broadleaf Weed Species	Weed Height Range for Optimum Control (inches)
Burcucumber	1-4
Cocklebur, Common	1-6
Jimsonweed	1-4
Morningglory	1-2
Nightshade, Eastern Black	1-4
Pigweed, Redroot	1-3
Pigweed, Smooth	1-3
Ragweed, Common	2-6
Ragweed, Giant	2-6
Smartweed, Pennsylvania	1-5
Sunflower	2-6
Velvetleaf	1-6
Waterhemp, Tall	1-4

*Best control of these weeds is obtained if a preemergence herbicide is applied (includingDual II Magnum, Bicep II Magnum, Bicep Lite II Magnum, or Dual II Magnum + AAtrex).

CROP FAILURE

If corn treated with Beacon is lost due to a catastrophe (for example, hailstorm), corn hybrids with good resilience to Beacon (refer to current list of non-sensitive corn hybrids) may be replanted 14 days or more after application, unless dry weather has persisted. A Clearfield corn hybrid may be replanted immediately. For control of weeds in replanted corn, Beacon may be applied postemergence a second time only if the total Beacon applied during the year does not exceed the standard rate (0.76 oz/A or 0.0356 lb ai/A).

ROTATIONAL CROPS

The following crops may be rotated at the intervals indicated following an application of Beacon Herbicide to corn.

Rotational Crop	Interval	Notes
Clearfield corn hybrids	None	Refer to **Crop Failure** section.
Field corn	14 days	Refer to **Crop Failure** section.
Winter wheat, winter barley, rye	3 months	Injury may occur if dry weather prevails during much of the time between Beacon Herbicide application and seeding of winter cereals.
Alfalfa, sweet corn, popcorn, cotton, dry beans, peanuts, peas, sorghum, soybeans, sunflowers, spring-seeded small grains, tobacco	8 months	Injury may occur to sorghum, alfalfa, or sunflowers if dry weather prevails during much of the time between Beacon Herbicide application and seeding of these crops.
Potatoes, green beans	8 months	Only following 0.38 oz/A rate (0.0178 lb ai/A).
All other crops	18 months	--

Notes: (1) For rotational crop restrictions when Beacon Herbicide is used in tank mixtures, refer to the rotations above for Beacon Herbicide and to the respective product labels of any mixing partner for additional restrictions. **(2) DO NOT use in the Red River Valley areas of Minnesota or North Dakota or areas with the same soil type or parent material of the Red River Valley, unless corn will be the only crop grown in the following 2 years.**

APPENDIX – TANK MIX PRODUCT INFORMATION

PRODUCT NAME	EPA REG. NO	ACTIVE INGREDIENT(S)
AAtrex	100-497	Atrazine
Accent	352-773	Nicosulfuron
Banvel	66330-276	Dimethylamine salt of dicamba
Bicep II Magnum	100-817	Atrazine and *S*-metolachlor
Bicep Lite II Magnum	100-827	Atrazine and S-metolachlor
Buctril	264-437	Octanoic acide ester of bromoxynil
Clarity	7969-137	Diglycolamine salt of 3,6-dichloro-o-anisic acid
Counter CR	241-314	Terbufos
Dual II Magnum	100-818	S-metolachlor
Marksman	7969-136	Potassium salt of

		dicamaba
Resource	59639-82	Flumiclorac pentyl ester

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place. **DO NOT** store this product under wet conditions. Handle outer bag carefully to avoid breakage of inner soluble packets.

Pesticide Disposal

DO NOT contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office.

Container Handling

Non-refillable container. DO NOT reuse or refill this container. Offer for recycling if available or dispose of the empty outer foil pouch in the trash as long as WSP is unbroken.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

Banvel® is a trademark of Arysta Lifescience North America, LLC

Counter CR® is a trademark of AMVAC Chemical Corporation

Buctril (EPA Reg. No.: 264-437) ® trademark of Bayer CropScience

Resource® Herbicide trademark of Valent USA Corporation

Manufactured for:
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