

100-705

11/23/2009

1/35



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Ms Pat Dinnen
Syngenta Crop Protection
P.O. BOX 18300
Greensboro, NC 27419

NOV 23 2009

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4

Dear Registrant:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated September 1, 2009 for:

EPA Registration 100-705

Beacon ® Herbicide

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and finds that the label change(s) requested falls within the scope of PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Banza Djapao of my staff at 703-305-7269.

Sincerely,

A handwritten signature in black ink, appearing to be "Linda Arrington".

Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs



United States
Environmental Protection Agency
 Washington, DC 20460

<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input checked="" type="checkbox"/>	Other

OPP Identifier Number
Notification

Application for Pesticide - Section I

1. Company/Product Number 100-705	2. EPA Product Manager Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Beacon Herbicide	PM# 25x	
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____	NOTIFICATION NOV 23 2009
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

Explanation: Use additional page(s) if necessary. (For Section I and Section II.).

Notification of label change per PR Notice 2007-4. This Notification is consistent with the guidance of PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	<input checked="" type="checkbox"/> Plastic
*Certification must be submitted		If "Yes" Unit Packaging wgt. No. per Container	If "Yes" Unit Packaging wgt. No. per container	<input type="checkbox"/> Glass	<input type="checkbox"/> Paper
		1.52 oz.	5	<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product		<input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled	<input checked="" type="checkbox"/> Other Pressure Sensitive		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Pat Dinnen		Title Label Group Leader		Telephone No. (Include Area Code) 336-632-2494	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature <i>Pat Dinnen</i>		3. Title Regulatory Specialist			
4. Typed Name Pat Dinnen		5. Date September 1, 2009			
(Circular stamp area with illegible text)					

Certification with Respect to Label Integrity

Version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
100-705	9/1/2009	000100-00705.20090831.BEACON_PRN2007-4_SEP2009.pdf

I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.

Pat Dinnen

Signature

September 1, 2009

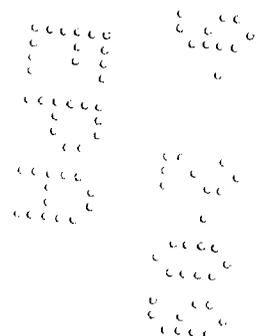
Date

Pat Dinnen

Name (typed)

Label Group Leader

Title



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Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419-8300
www.syngenta.com



FedEx

September 1, 2009

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

Attention: Ms. Linda Arrington

**SUBJECT: BEACON® HERBICIDE
EPA REG. NO. 100-705
NOTIFICATION OF LABEL CHANGE PER PR NOTICE 2007-4**

Syngenta Crop Protection, Inc. is submitting Notification for Beacon Herbicide, EPA Reg. No. 100-705. Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

Attached are:

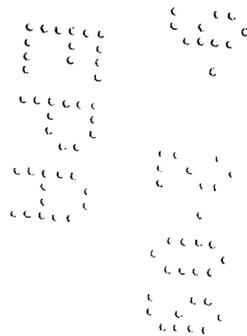
- One copy of the label with the changes clearly marked
- One unmarked copy of the label
- A CD of the unmarked copy of the label for "Electronic Comparison and Review"
- Certificate with Respect to Label Integrity Form
- Completed EPA Form 8570-1

Thank you in advance for approving this Notification. If you have any questions, please contact me at 336-632-2494.

Sincerely,

Pat Dinnen
Label Group Leader
Regulatory Affairs

Enclosures



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Accu-Pak®

Beacon®

Herbicide

NOTIFICATION

NOV 23 2009

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

Active Ingredient:

Primisulfuron-methyl: 3-[4,6-Bis(difluoromethoxy)-pyrimidin-2-yl]-1-(2-methoxycarbonyl-phenylsulfonyl) urea 75.0%

Other Ingredients: 25.0%

Total: 100.0%

Beacon is a water-dispersible granule.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-705

EPA Est. 0656387-AR-003

Product of Switzerland
Formulated in the USA

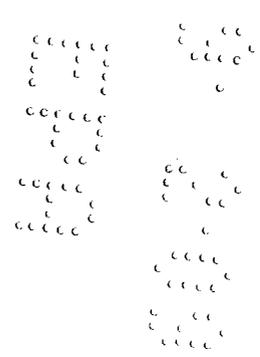
This outer protective bag contains Beacon in 5 small, inner water-soluble packets. Entire inner packets and contents dissolve in water. After opening outer bag, immediately dump the required number of unopened inner packets into the partially filled sprayer or mix tank. Do not excessively handle the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

5 X 1.52 Ounce
Water-Soluble Packets

7.6 Ounces
Total Net Weight

This product is filled by weight not by volume.

SCP 705A-L8X 0903 [Material No. 152721]



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 inhaled	<ul style="list-style-type: none"> • 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	<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.
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.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	
<p>HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372</p>	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

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



Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

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

Engineering Control Statements

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.

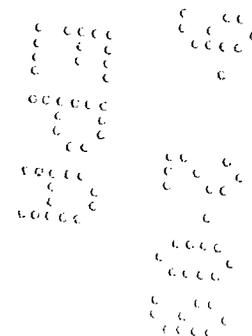
User Safety Recommendations

Users should:

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

Environmental Hazards

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.



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 should 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, Inc. or Seller. All such risks shall be assumed by Buyer and User, and 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. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **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
- Chemical-resistant gloves made of any waterproof material
- 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.

STORAGE AND DISPOSAL

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

GENERAL INFORMATION

Beacon 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 alone and in tank mix combinations.

The level of weed control following Beacon 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 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. 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 application depending upon weed species and growing conditions. Weeds not completely killed by Beacon are often stunted and are less competitive to corn. Beacon reaching the soil during a postemergence application provides preemergence control of certain weed species.

This herbicide controls weeds by inhibiting a biochemical process which produces certain essential amino acids necessary for plant growth. The inhibited enzyme system is acetolactate synthase (ALS). Occurrence of ALS-resistant weed biotypes can be prevented or delayed by using this product in sequence or in tank mixtures with other herbicides having a different mode of action, and by using some form of mechanical control or a herbicide with a different mode of action to control weed escapes before they set seed. Both modes of action should provide acceptable control of the specific weed if applied alone at the rates used in tank mixture.

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

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 application at the standard use rate (0.76 oz./A) or the initial application of a split postemergence application (2 applications of 0.38 oz./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 application of the split must be applied directed with drop nozzles when corn is between 20 inches tall and before tassel emergence.
2. Beacon should not be applied 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.
3. If irrigation is necessary following application, delay for 24 hours to minimize potential injury, particularly on coarse-textured soils.

4. a. If a "normal" or IT* corn hybrid (not an IR or IMR* hybrid) is planted and Dyfonate®, Lorsban®, Thimet®, or other organophosphate insecticide is applied at planting or before applying Beacon, temporary injury may occur following the Beacon application. Do not apply Beacon if this corn crop was previously treated with Counter® 15G (any application method) or Counter CR® applied in-furrow at planting or over the row at cultivation, as severe crop injury may occur. Application of Beacon 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.

*IT – Corn with enhanced imidazolinone herbicide tolerance.

*IR/IMR – Corn with enhanced imidazolinone herbicide resistance.

- b. If an IR or IMR corn hybrid is planted, organophosphate insecticides, including terbufos (Counter), 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 is completely overcome by corn hybrids with IR or IMR designations, but not by IT hybrids; i.e., IT hybrids should be considered like "normal" hybrids with regard to this interaction.
5. Do not make a foliar postemergence or soil application of any organophosphate insecticide within 10 days before or 7 days after a Beacon application, or severe crop injury may occur.
6. Beacon may be applied to all field corn hybrids except the few that are classified by Syngenta as potentially susceptible to injury following Beacon application. Consult your chemical dealer, seed supplier, or Syngenta representative for a current listing of field corn hybrids classified as "potentially susceptible" to Beacon.
7. Popcorn and Seed Corn: Beacon 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 nor does Syngenta have access to all seed company data. Therefore, inbred lines and popcorn hybrids must be thoroughly tested for potential sensitivity to Beacon before treating large acreages. To avoid crop injury, popcorn and inbred lines should not be sprayed with over-the-top applications of Beacon; i.e., only semi-directed or directed applications using drop nozzles when the popcorn or inbred plants are between 10 and 48 inches tall, and before tassel emergence.
8. Do not use Beacon on sweet corn or ornamental (Indian) corn.

9. Do not irrigate within 4 hours after Beacon application. Rainfall occurring within 4 hours after Beacon application may reduce weed control.
10. Aphids or other insects infesting johnsongrass may move to the corn crop following control of the johnsongrass with Beacon. 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.
11. Crop competition with the weeds is particularly important for season-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 recommendations listed later in this label.
12. 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.
13. Do not apply Beacon in tank mixtures with Poast® or Poast Plus® herbicides, as grass control is often reduced significantly and/or crop injury may occur.
14. Observe all precautions and limitations on the label of each product used in tank mixtures with Beacon.

APPLICATION PROCEDURES

Ground Spray Equipment: Use stainless steel, aluminum, fiberglass, or polyethylene spray tanks. Spray nozzles should be uniformly spaced and of the same size, and should provide accurate and uniform application. Use spray nozzles which provide medium-coarse droplets to provide good coverage and minimize drift.

To help assure accuracy, calibrate sprayer at the beginning of the season before use and recalibrate frequently, especially when changing carriers. For ground application, use a minimum of 10 gals. of water per acre. Higher volumes (e.g., 20 gals./A) should be used under severe weed infestations to ensure 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 recommended. The pump should provide a minimum of 20 gals./minute/100 gal. tank size circulated through correctly positioned sparger tubes or jets. Agitation during both mixing and application is essential. Use screens to protect the pump and to prevent

nozzles from clogging. Screens placed on the suction side of the pump should be 16-mesh or coarser. Do not place a screen 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 recommendations.

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. To reduce spray drift, do not apply when winds are in excess of 10 mph. Allow adequate distance between target area and desirable vegetation to prevent drift to nontarget areas. Avoid spray overlap, because crop injury may result. **Use a nozzle spacing and boom height arrangement that avoid applying an excessive rate of Beacon directly over the corn rows.** Boom height for broadcast over-the-top application should be based upon the free-standing height of the corn, not height above the soil surface; and should be at least 15 inches above the corn canopy.

Do not apply Beacon as a band application directly over the corn rows. Beacon must be applied postemergence over-the-top, directed, or semi-directed. If the corn canopy would prevent adequate weed coverage, apply Beacon directed or semi-directed with drop nozzles even if the corn height is less than 20 inches. Beacon must be applied directed with drop nozzles when corn is between 20 inches tall and before tassel emergence. **Avoid all direct or indirect contact (such as spray drift) of Beacon with crops other than those recommended for treatment on this label, since injury may occur.**

Chemigation: Do not apply this product through any type of irrigation system.

Aerial Application: Apply Beacon in water using a minimum spray volume of 3 gals./A. Include a nonionic surfactant, i.e., X-77®, at 1 qt./100 gals. of spray mix (0.25% volume/volume) or a good quality crop oil concentrate at no more than 2 pts./A. (See following **Mixing Instructions**.) Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 ft. above the corn with low-drift nozzles at a maximum pressure of 40 psi and wind speed not exceeding 10 mph to assure accurate Beacon application within the target area.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

Do not apply Beacon by aerial application in New York state.

Recommendations to Avoid Spray Drift

As with all crop protection products, it is important to avoid off-target movement.

Do not allow spray from ground or aerial equipment to drift onto adjacent land or crops, as even small amounts may injure sensitive plants. When drift may be a problem, take steps to reduce spray drift, including:

- Do not spray if wind speeds are or become excessive. Do not spray if wind speed is in excess of 10 mph. If sensitive crops or plants are downwind, extreme caution must be used under all conditions. Do not spray if winds are gusty.
- Use extreme caution when conditions are favorable for drift (high temperatures, drought, low relative humidity), especially when sensitive plants are located nearby.
- 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.
- Do not apply when a temperature inversion exists. If an inversion condition is suspected, consult with local weather services before making an application.
- Further reductions in drift can be obtained by:
 1. Using nozzles that provide a uniform droplet size. Use nozzles that produce medium to coarse droplets (250-400 microns VMD) that are less prone to result in spray drift.
 2. Use flat fan nozzles. For example, Turbo Teejet, XR® Teejet, RF Raindrop®, or similar "low pressure" nozzles are preferred.
 3. Recalibrate sprayer using reduced spray pressures and increased spray volumes to produce larger droplets when conditions favor drift.
 4. Applying as close to target plants as practical to obtain a good spray pattern for adequate coverage, while maintaining a minimum boom height of 15 inches over the crop canopy for ground application.

IMPORTANT: Follow the correct mixing order on the label or the material may not mix properly. Poor mixing may result in crop injury or poor product performance.

Mixing Instructions

1. Make sure the spray tank is clean before mixing. If it is contaminated with other materials, mixing problems and/or clogging may occur, or injury to the crop may result.
2. Fill the spray tank 1/4 - 1/2 full with clean water and begin agitation.

3. Make certain that the agitation system is working properly and creates a rippling or rolling action on the liquid surface. Maintain agitation throughout the mixing and spraying process.
4. Drop the required number of unopened water-soluble packets containing Beacon into the spray tank while continuing agitation and allow time to fully disperse. Add any other products packaged in water-soluble film to the tank at the same time. Allow the packets to completely dissolve and the contents of the packets to fully disperse into the mix water. **Important: Water-soluble packets must always be the first material put into the spray tank after water.**
5. While maintaining agitation, continue filling the spray tank. When the tank is 3/4 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.
6. Follow by adding either (a) a nonionic surfactant with a minimum of 80% of the constituents effective as a spray adjuvant (e.g., X-77), at the rate of 1 qt./100 gals. of spray volume (0.25% volume/volume) or (b) a petroleum- or vegetable-based crop oil concentrate containing not less than 12% emulsifier at 1-4 pts./A as specified on the oil adjuvant label. The concentration of the oil adjuvant should not exceed 2.5% volume/volume. In addition to crop oil concentrate or nonionic surfactant, liquid nitrogen fertilizer (28-34% nitrogen-ammonium form) may also be added at 2-4 qts./A. Instead of the liquid nitrogen fertilizer, spray grade ammonium sulfate may be used at the rate of 2-4 lbs./A. Liquid nitrogen fertilizers or ammonium sulfate should 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.**
7. 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 is used alone or tank mixed with AAtrex (atrazine) or Accent, either crop oil concentrate or a nonionic surfactant should be included, with or without liquid nitrogen fertilizer or ammonium sulfate, as described in item 6 above. When Beacon is tank mixed with Resource, crop oil concentrate is the recommended adjuvant but should be added at 1-2 pts./A. The addition of liquid nitrogen fertilizer to the Beacon 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 recommended 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.

8. Complete filling the tank, maintaining sufficient agitation at all times to ensure surface action until the spray tank mixture is uniform.
9. An anti-foaming agent may be added to reduce excessive foaming if needed.
10. **Do not leave spray in the spray tank without continuous agitation.** Always maintain agitation to avoid separation and buildup of undesirable residues on the walls of the spray tank.
11. Make only sufficient spray mixture which can be used the day in which it will be sprayed. Beacon will remain active in the spray solution for at least 48 hours.

Cleaning Equipment after Beacon Application

Because most crops other than corn are extremely sensitive to low rates of Beacon, 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 gals. 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 such as Clorox®.
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 APPLIED ALONE

Grass and broadleaf weeds which are controlled following postemergence application of a full (0.76 oz./A) rate of Beacon 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 application. Consult their respective labels for directions, precautions, and limitations before applying.

Beacon is packaged in water-soluble packets. One packet treats 2 acres at the standard use rate of Beacon (0.76 oz./A). Apply a single application of Beacon 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. 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) should be directed or semi-directed. Use drop nozzles for directed or semi-directed applications.

Seed Corn and Popcorn: Refer to Precaution 7 for application timing and other information.

Cultivation or split application of the standard use rate is recommended 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 application is recommended before making a cultivation or weed control may be reduced. Where shattercane is the target weed species, Beacon may be applied at cultivation, but some regrowth of shattercane may occur. Apply Beacon ahead of cultivators; do not cultivate and then apply Beacon.

For optimum control of johnsongrass, cultivation or split application of the standard use rate (2 applications of 0.38 oz./A) is recommended to control reinfestation that may occur from regrowth. Alternatively, apply 0.5 oz./A (3 acres/packet) at the first application, followed by an application of 0.25 oz./A (6 acres/packet) to control regrowth. The initial application of the split should be made 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. The second application of the split should be made 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 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 by applying 0.5 oz./A (3 acres/packet) of Beacon. Follow with a second application of 0.25 oz./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 application is listed in Table 4.

Restrictions: To avoid possible illegal crop residues: (1) Do not graze or feed forage from Beacon-treated corn to livestock within 30 days after application, (2) Do not harvest silage within 45 days after application. (3) Do not harvest grain within 60 days after application. (4) Do not apply more than the standard use rate per acre of Beacon. (5) Complete all Beacon applications to corn before tassel emergence.

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Table 1: Grass Weed Species Controlled with Beacon

Grass Weed Species	Weed Height Range for Optimum Control (inches)
Foxtails (<i>Setaria</i> spp.)***, ****	1-2
Johnsongrass, Rhizome (<i>Sorghum halepense</i>)*, ****	8-16
Johnsongrass, Seedling (<i>Sorghum halepense</i>)****	4-12
Nutsedge, Yellow (<i>Cyperus esculentus</i>)***	1-4
Panicum, Fall (<i>Panicum dichotomiflorum</i>)	Less than 2
Quackgrass (<i>Elytrigia repens</i>)** (formerly <i>Agropyron repens</i>)	4-8
Ryegrass, Annual (<i>Lolium multiflorum</i>)	1-4
Sandbur (<i>Cenchrus</i> spp.)***	1-4
Shattercane (<i>Sorghum bicolor</i>)****	4-12
Sorghum-almum (<i>Sorghum almum</i>)	4-12
Sorghum, Volunteer (<i>Sorghum bicolor</i>)	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). Do not use Beacon to control these species if the weeds are subject to stress conditions (i.e., drought, cold temperatures, etc.), or are not actively growing. Some other means of control should 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, should be used alone or in tank mixture with Beacon to control these biotypes.

Table 2: Broadleaf Weed Species Controlled with Beacon Applied at 0.76 oz./A

Broadleaf Weed Species	Weed Height Range for Optimum Control (inches)
Alfalfa (<i>Medicago sativa</i>)*	Less than 1.5
Artichoke, Jerusalem (<i>Helianthus tuberosus</i>)	1-4
Beggarweed, Florida (<i>Desmodium tortuosum</i>)	
Burcucumber (<i>Sicyos angulatus</i>)	
Cocklebur, Common (<i>Xanthium strumarium</i>)**	
Devilsclaw (<i>Proboscidea louisianica</i>)	
Horsenettle (<i>Solanum carolinense</i>)*	2-9
Horseweed (Marestail, <i>Conyza canadensis</i>)*	1-4
Jimsonweed (<i>Datura stramonium</i>)	
Kochia (<i>Kochia scoparia</i>)**	
Ladysthumb (<i>Polygonum persicaria</i>)	Less than 1.5
Lambsquarters, Common (<i>Chenopodium album</i>)*	
Morningglory (<i>Ipomoea</i> spp.)*	1-4
Mustard, Wild (<i>Brassica kaber</i>)	
Nightshade, Black (<i>Solanum nigrum</i>)	
Nightshade, Eastern Black (<i>Solanum ptycanthum</i>)	
Nightshade, Hairy (<i>Solanum sarrachoides</i>)	
Pigweeds (<i>Amaranthus</i> spp.)**	
Puncturevine (<i>Tribulus terrestris</i>)	
Radish, Wild (<i>Raphanus raphanistrum</i>)	
Ragweed, Common (<i>Ambrosia artemisiifolia</i>)	2-9
Ragweed, Giant (<i>Ambrosia trifida</i>)	1-4
Sesbania (<i>Sesbania exaltata</i>)	Less than 1.5
Sicklepod (<i>Cassia obtusifolia</i>)	
Sida, Prickly (<i>Sida spinosa</i>)	1-4
Smartweed, Pennsylvania (<i>Polygonum pensylvanicum</i>)	2-9
Sunflowers (<i>Helianthus</i> spp.)**	
Thistle, Canada (<i>Cirsium arvense</i>)*	1-4
Thistle, Russian (<i>Salsola iberica</i>)*,**	
Velvetleaf (<i>Abutilon theophrasti</i>)***	

*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, should be used alone or in tank mixture with Beacon to control those biotypes.

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

Beacon applied at 0.38 oz./A (4 acres/packet) will control the broadleaf weeds listed in Table 3 when applied at the specified heights. Additionally, Beacon applied at 0.38 oz./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 at the rates listed in Table 2, or in combination with other broadleaf herbicides as described in the **Beacon Tank Mix Combinations for Weed Control in Corn** section.

Table 3: Broadleaf Weed Species Controlled with Beacon Applied Alone at 0.38 oz./A*

Broadleaf Weed Species	Weed Height Range for Optimum Control (inches)
Cocklebur, Common (<i>Xanthium strumarium</i>)	1-4
Jimsonweed (<i>Datura stramonium</i>)	1-4
Nightshade, Eastern Black (<i>Solanum ptycanthum</i>)	1-4
Pigweed, Redroot (<i>Amaranthus retroflexus</i>)	1-3
Pigweed, Smooth (<i>Amaranthus hybridus</i>)	1-3
Ragweed, Common (<i>Ambrosia artemisiifolia</i>)	2-6
Ragweed, Giant (<i>Ambrosia trifida</i>)	2-6
Smartweed, Pennsylvania (<i>Polygonum pennsylvanicum</i>)	1-2
Sunflowers (<i>Helianthus</i> 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 (2 acres/packet) rate of Beacon.

Table 4: Number of Beacon 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		
	Single Application	Split 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 TANK-MIX COMBINATIONS FOR WEED CONTROL IN CORN

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

Precautions for Tank Mix Combinations: (1) Beacon 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 6 under **Mixing Instructions** for information on rates of the various additives. (2) 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. In mixtures with those products, 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 gals. of spray volume (0.25% volume/volume). Do not add liquid nitrogen when using Buctril, Buctril + atrazine, or 2,4-D tank mixtures. (3) Do not apply Beacon in tank mixture with cyanazine (Bladex® or Extrazine® II), or severe crop injury may result. (4) Syngenta does not recommend tank mixtures of Beacon with other agricultural products not listed on this label due to the possibility of reduced control, crop injury, or other undesirable interactions. If Beacon is applied in tank mixtures with other products, follow the most restrictive labeling requirements.

Beacon Standard Rate (0.76 oz./A, 2 acres/packet) Tank Mixtures

For postemergence control of weeds not controlled by Beacon 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 as recommended in this label and use the tank mix partner as directed on its label.

Beacon Reduced Rate (0.38 oz./A, 4 acres/packet) Tank Mixtures

For postemergence control of weeds in corn, Beacon applied at 0.38 oz./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

Weeds should be actively growing at application. If weeds exceed the heights listed in Tables 5-10, use either the standard 0.76 oz./A rate of Beacon 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 at 0.38 oz./A may be tank mixed with Buctril + atrazine at 1-2.5 pts./A or Marksman at 1-2 pts./A. Apply mixtures with Buctril + atrazine when the corn is 4-12 inches tall and Marksman should be applied 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 lbs. a.i./A per calendar year. Control of relatively large cocklebur, sunflower, and velvetleaf may be antagonized somewhat by tank mixtures of Beacon with atrazine containing products.

For all Beacon reduced rate tank mixtures, a preemergence herbicide (such as Dual II MAGNUM, Bicep II MAGNUM, Bicep Lite II MAGNUM, Dual II MAGNUM + AAtrex) should be applied for grass control, and will improve 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 with AAtrex (Atrazine) at 2-3 pts./A*

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

*The rates of AAtrex or atrazine listed above are expressed in pints of 4L per acre. If another formulation is used, adjust the dosage to apply the same amount of active ingredient (1-1½ lbs. a.i./A).

Table 6: Weeds Controlled or Suppressed with Tank Mixtures of Beacon at 0.38 oz./A with Accent at 0.33 oz./A*

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

*These Beacon + Accent tank mixtures are for rescue control of escaped grasses and broadleaf weeds following preemergence treatments of a grass herbicide (such as Dual MAGNUM or Bicep MAGNUM).

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

***Partial control/suppression: 1/8-1/2 pt./A of Banvel can be added to this mixture for improved control of this weed. If 1/8 pt./A (2 oz./A) of Banvel or Clarity is used, up to 4 pts./A 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 1/8 pt./A of Banvel or Clarity to avoid crop injury.

****Partial control/suppression: 1-1½ lbs. a.i./A of AAtrex or atrazine can be added to this mixture for improved control of this weed.

*****Partial control/suppression: 1/6-1/3 oz./A of additional 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 at 0.38 oz./A with Banvel or Clarity*

Broadleaf Weed Species	Pts. of Banvel or Clarity	Weed Height Range for Optimum Control (inches)
Bindweed, Hedge	¼ - ½	1 - 8
Burcucumber	¼ - ½	1 - 4
Cocklebur, Common	1/8 - ½	1 - 4
Dogbane, Hemp**	½	2 - 6
Horsenettle	¼ - ½	2 - 6
Ivy, Poison**	½	1 - 3
Jimsonweed	¼ - ½	1 - 4
Kochia	¼ - ½	1 - 4
Ladysthumb	¼ - ½	1 - 4
Lambsquarters, Common	1/8 - ½	1 - 3
Nightshade, Black	¼ - ½	1 - 4
Nightshade, Eastern Black	1/8 - ½	1 - 4
Pigweeds	1/8 - ½	1 - 5
Pokeweed**	½	2 - 6
Ragweed, Common	1/8 - ½	2 - 6
Ragweed, Giant	1/8 - ½	2 - 6
Sunflower, Common	1/8 - ½	2 - 10
Smartweed, Pennsylvania	¼ - ½	1 - 4
Thistle, Canada	½	1 - 8
Velvetleaf	¼ - ½	1 - 4

*Best control is obtained if weeds are at the listed heights at application. Use the higher rate of Banvel or Clarity when weeds are at the higher end of the height range or if conditions are unfavorable for weed growth (i.e., drought, cool temperatures, etc.). If 1/8 pt./A (2 oz./A) of Banvel or Clarity is used, 2 pts./A 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 1/8 pt./A of Banvel or Clarity to avoid crop injury.

**Partial control/suppression

Table 8: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon at 0.38 oz./A with Buctril*

Broadleaf Weed Species	Pts. of Buctril	Weed Height Range for Optimum Control (inches)
Burcucumber	$\frac{1}{2} - \frac{3}{4}$	1 - 3
Cocklebur, Common	$\frac{1}{2} - \frac{3}{4}$	1 - 4
Jimsonweed	$\frac{1}{2} - \frac{3}{4}$	1 - 4
Ladysthumb	$\frac{1}{2} - \frac{3}{4}$	1 - 4
Lambsquarters, Common	$\frac{1}{2} - \frac{3}{4}$	1 - 8
Nightshade, Black	$\frac{1}{2} - \frac{3}{4}$	1 - 4
Nightshade, Eastern Black	$\frac{1}{2} - \frac{3}{4}$	1 - 4
Pigweeds	$\frac{1}{2} - \frac{3}{4}$	1 - 5
Ragweed, Common	$\frac{1}{2} - \frac{3}{4}$	2 - 10
Ragweed, Giant	$\frac{1}{2} - \frac{3}{4}$	2 - 6
Smartweed, Pennsylvania	$\frac{1}{2} - \frac{3}{4}$	1 - 4
Sunflower, Common	$\frac{1}{2} - \frac{3}{4}$	2 - 6
Velvetleaf	$\frac{3}{4} - 1$	1 - 4

*Best control is obtained if weeds are at the listed heights at application. Use the higher rate of Buctril if conditions are unfavorable for weed growth (i.e., drought, cool temperatures, etc.).

Table 9: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon at 0.38 oz./A with 2,4-D*

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

*Best control is obtained if weeds are at the listed heights at application. Use the higher rate of 2,4-D when weeds are at the higher end of the height range or if conditions are unfavorable for weed growth (i.e., drought, cool temperatures, etc.).

**The rates of 2,4-D listed in this table are in pints of 4 lbs./gal. formulation per acre. If another formulation is used, adjust the dosage to apply the same amount of active ingredient (0.125-0.375 lb. a.i./A).

***Partial control/suppression

Table 10: Broadleaf Weeds Controlled or Suppressed with Tank Mixtures of Beacon at 0.38 oz./A with Resource at 4 oz./A*

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 (such as Dual 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 tolerance to Beacon (refer to current list of tolerant corn hybrids) may be replanted 14 days or more after application, unless dry weather has persisted. An IR or IMR 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 cropping season does not exceed the standard rate (0.76 oz./A).

ROTATIONAL CROPS

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

Rotational Crop	Interval	Notes
IR or IMR Field 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 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 application and seeding of these crops.
Potatoes, green beans	8 months	Only following 0.38 oz./A rate.
All other crops	18 months	--

Notes: (1) For rotational crop restrictions when Beacon is used in tank mixtures, refer to the rotations above for Beacon 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 seasons.**

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U.S. Patent No. 4,478,635

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Formulated in the USA

Manufactured for:
Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP 705A-L8X 0903

Accu-Pak®

Beacon®

Herbicide

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

Active Ingredient:

Primisulfuron-methyl: 3-[4,6-Bis(difluoromethoxy)-pyrimidin-2-yl]-1-(2-methoxycarbonyl-phenylsulfonyl) urea	75.0%
Other Ingredients:	25.0%
<hr/> Total:	<hr/> 100.0%

Beacon is a water-dispersible granule.

See directions for use in attached booklet.

AGRICULTURAL USE REQUIREMENTS

<p>Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.</p>
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EPA Reg. No. 100-705

EPA Est. 0656387-AR-003

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SCP 705A-L8X 0903

This product is filled by weight not by volume.

5 X 1.52 ounce
Water-Soluble Packets

7.6 ounces
Total Net Weight

KEEP OUT OF REACH OF CHILDREN.

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

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

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 inhaled	<ul style="list-style-type: none"> • 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	<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.
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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Fire, or Accident), Call 1-800-888-8372	

Environmental Hazards

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.

Chemigation: Do not apply this product through any type of irrigation system.

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.

BEA 705A L8X 0903 CLEAN – pd – 08/26/09
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