



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 10, 2021

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

Subject: Registration Review Label Amendments Incorporating Mitigation Measures from the Atrazine and Metolachlor Interim Decisions; the Technical Registrants' Commitments for the Endangered Species Act (ESA) Biological Evaluation for Atrazine; and the Biological Opinion for Metolachlor
Product Name: Bicep II Magnum Herbicide
EPA Registration Number: 100-817
Application Dates: 11/17/2020 and 6/11/2021
Decision Numbers: 576428 and 578272

Dear Ms. McCaskill:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Atrazine and Metolachlor Interim Decisions, the atrazine technical registrants' commitments for the ESA Biological Evaluation, and the Biological Opinion for metolachlor. The Agency has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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

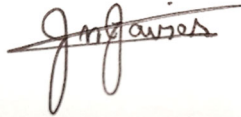
A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved

Page 2 of 2
EPA Reg. No. 100-817
Decision No. 576428 and 578272

labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Anitha Kisanga at Kisanga.Anitha@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Julie Javier", is written over a light yellow rectangular background.

Julie Javier, Team Leader
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

[MASTER LABEL]

**RESTRICTED USE PESTICIDE
(GROUND AND SURFACE WATER CONCERNS)**

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

THIS PRODUCT IS A RESTRICTED-USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

ATRAZINE	GROUP	5	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

Bicep II Magnum®
Herbicide

For weed control in corn and grain or forage sorghum

Active Ingredients:	
Atrazine (CAS No. 1912-24-9)	33.0%
Atrazine related compounds.....	0.7%
S-metolachlor (CAS No. 87392-12-9).....	26.1%
<hr/>	
Other Ingredients:	40.2%
Total:	100.0%

Bicep II Magnum contains 3.1 lb atrazine + related compounds per gallon and 2.4 lb S-metolachlor active ingredient per gallon.

Bicep II Magnum is formulated as a suspension concentrate (SC).

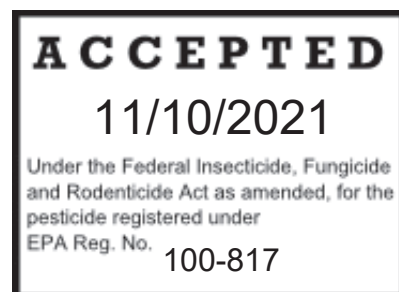
**KEEP OUT OF REACH OF CHILDREN.
CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-817
EPA Est.

SCP 817A

2.5 gallons
____ gallons
Net Contents



FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
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 by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
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, Leak, Fire or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Mixers, loaders, applicators, flaggers, and other handlers not using engineering controls must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing and loading, or exposed to the concentrate

Mixers, loaders, applicators, and other handlers using engineering controls must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves and apron for mixers and loaders

See engineering controls for additional 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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Control Statements

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(6)]. Pilots must wear the PPE required on this labeling for applicators, however, they need not wear chemical-resistant gloves when using an enclosed cockpit.

Flaggers supporting aerial applications must use an enclosed cab that meets the definition on the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)] for dermal protection.

Mixers and loaders supporting aerial applications must use a closed system that meets the requirements for dermal protection listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)] and must: wear the personal protective equipment required for mixers and loaders, wear protective eyewear if the system operates under pressure, and be provided and have immediately available for use in an emergency, such as a spill or equipment breakdown: chemical-resistant footwear.

When applicators 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)(5)], 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/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

This product is toxic to aquatic invertebrates. 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. This pesticide contains atrazine, which has been shown to be toxic to aquatic invertebrates. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply when weather conditions favor drift from treated areas.

Groundwater Advisory

Bicep II Magnum contains both the active ingredients atrazine and S-metolachlor.

Atrazine can travel (seep or leach) through soil and can enter groundwater which may be used as drinking water. Atrazine has been found in groundwater. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (groundwater) is close to the surface and where these soils are very permeable, i.e., well-drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

S-metolachlor is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater 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 and through ground spray drift. 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 weeks or months 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 S-metolachlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

NON-TARGET ORGANISM ADVISORY STATEMENT

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

Reporting Ecological Incidents:

To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1-800-888-8372.

Mixing/Loading Instructions

Take care when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Use check-valves or antisiphoning devices on all mixing equipment.

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

maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

This product must not be mixed or loaded within 50 ft of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied aerially or by ground within 66 ft of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-ft buffer or setback from runoff entry points must be planted to crop, or seeded with grass or other suitable crop.

Tile-Outletted Terraced Fields Containing Standpipes

One of the following restrictions must be used in applying atrazine to tile-outletted terraced fields containing standpipes.

1. Do not apply this product within 66 ft of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2-3 inches in the entire field.
3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when a high crop residue management practice is practiced. High crop residue management is described as a crop management practice where little or no crop residue is removed from the field during and after crop harvest.

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 the 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 Limitation 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.

Endangered Species Protection Requirements

It is a Federal offense to use any pesticide in a manner that results in an unauthorized “take” (e.g., kill or otherwise harm) of an endangered species and certain threatened species, under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult <http://www.epa.gov/espp/>, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be accessed through www.atrazine-watershed.info or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Syngenta Crop Protection, LLC for a refund.

Use Bicep II Magnum only in accordance with use directions on this label or in separately published EPA accepted supplemental labeling for this product.

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 24 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 over short-sleeve shirt and short pants
- Chemical-resistant gloves made of any waterproof materials
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures

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

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

Not for use in the states of Hawaii or Alaska, or in the U.S. territories (Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, and the North Mariana Islands).

PRODUCT INFORMATION

Bicep II Magnum is a selective herbicide labeled for preplant, preemergence, or postemergence control of many annual grasses and broadleaf weeds in corn. Bicep II Magnum can also be used before crop emergence for control of most annual grasses and broadleaf weeds in grain or forage sorghum, provided the sorghum seed has been properly treated with Concep®. Bicep II Magnum may be tank mixed with other herbicides for weed control in conventional, minimum-till, and no-till corn, grain sorghum, or forage sorghum.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, 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.

When tank mixing or sequentially applying atrazine or products containing atrazine to corn or sorghum, do not exceed an application rate of 2.0 pounds active ingredient of atrazine per acre for any single application and the total pounds of atrazine applied (lb ai per acre) must not exceed 2.5 pounds active ingredient per acre per year.

Following many years of continuous use of atrazine (one of the ingredients in Bicep II Magnum), and products chemically related to atrazine, biotypes of some of the weeds listed on this label which are controlled by the atrazine component have been reported to develop resistance to this and chemically related herbicides. Where this is known or suspected, and weeds controlled by this product are expected to be

present along with resistant biotypes, the use of Bicep II Magnum in combination or in sequence with registered herbicides which do not contain triazines may enhance product performance. Consult with your State Agricultural Extension Service for specific advice.

Bicep II Magnum alone or in tank mixture with AAtrex®, Dual Magnum®, Dual II Magnum®, or Princep® may be applied early preplant, preplant surface, preplant incorporated, or preemergence on corn, in water or fluid fertilizer. Apply postemergence treatments of Bicep II Magnum to corn, alone or in combination, using water only as the carrier. Bicep II Magnum may be applied in tank mix combination with Gramoxone® brands, or solo glyphosate brands, with or without the above herbicides preplant surface or preemergence to corn. Bicep II Magnum alone may also be applied on sorghum early preplant, preplant incorporated, preplant surface, or preemergence in water or in fluid fertilizer.

Bicep II Magnum may be applied in water by aircraft. Make applications in fluid fertilizer by ground equipment only.

USE PRECAUTIONS FOR ALL BICEP II MAGNUM APPLICATIONS

- Where reference is made to weeds partially controlled, partial control can either mean erratic control from good to poor or consistent control at a level below that generally considered acceptable for commercial weed control.
- Dry weather following preemergence application of Bicep II Magnum or a tank mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage corn or sorghum.
- Avoid spray overlap, as crop injury may result.

RESTRICTIONS FOR ALL BICEP II MAGNUM APPLICATIONS

- Do not apply this product through any type of irrigation system.
- Do not apply under windy conditions or under conditions which favor runoff or wind erosion of soil containing this product to nontarget areas.
- Do not use a sprayer or applicator contaminated with other materials, or crop damage or sprayer clogging of the application device may occur. Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution in a responsible manner.
- To prevent off-site movement due to runoff or wind erosion:
 - Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, ensure that the soil surface is settled by rainfall or irrigation first.

- Do not apply to impervious substrates, such as paved or highly compacted surfaces.
- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat nontarget crops, unless at least ½ inch of rainfall has occurred between application and the first irrigation.
- Users must only apply to fallow land in the following states according to the prescribed rotation pattern in the table below:

Fallow Rotation Pattern	Fallow Use Authorized in these States only
Wheat-Corn-Fallow	CO, KS, ND, NE, SD & WY
Wheat-Fallow-Wheat	CO, KS, ND, NE, SD & WY
Wheat-Sorghum-Fallow	AR, CO, GA, IL, KS, LA, MS, MO, NE, NM, NC, OK, SD & TX

WEED RESISTANCE MANAGEMENT

ATRAZINE	GROUP 5	HERBICIDE
S-METOLACHLOR	GROUP 15	HERBICIDE

Naturally occurring biotypes of certain weed species with resistance to triazines, ALS, PPO, Glycine (glyphosate) and HPPD-inhibiting herbicides are known to exist. If biotypes of weeds resistant to ALS, PPO and glycine inhibitors are present in the field, this herbicide should control them if they are listed as controlled on this label.

To reduce the risk of weeds developing resistance to Group 5 and Group 15 herbicides implement a program including both preemergence and postemergence herbicides that provide effective control of all weeds using multiple modes of action. This includes scouting fields before application to ensure the herbicide will be appropriate for the weeds present. Scout fields and eliminate weed escapes. If suspected weed resistance is observed against a particular weed species contact your Syngenta or retailer representative or call Syngenta Customer Service (1-800-334-9481). Lack of weed control is not necessarily an indicator of weed resistance.

Consider weed resistance management strategies that include two or more modes of action where a minimum of two modes of action are effective at controlling the target weed when either are applied alone.

Read and follow all label directions.

Bicep II Magnum contains two herbicide active ingredients and two modes of action and can be an effective component of a weed resistance management strategy.

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 such as 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, such as 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.

SOIL TEXTURE INFORMATION

Within rate ranges in all tables on this label, use the lower rate on soil relatively coarse-textured or low in organic matter; use the higher rate on soil relatively fine-textured or high in organic matter.

Directions are based upon soil textures, which are defined as follows:

COARSE	Sand, loamy sand, sandy loam
MEDIUM	Loam, silt loam, silt
FINE	Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay

BICEP II MAGNUM APPLIED ALONE – CORN (ALL TYPES), GRAIN SORGHUM, OR FORAGE SORGHUM

Weeds Controlled or Partially Controlled by Early Preplant, Preplant Surface-Applied, Preplant Incorporated, or Preemergence Applications of Bicep II Magnum

Weeds Controlled		Weeds Partially Controlled**
barnyardgrass (watergrass)	chickweed	sandbur
browntop panicum	cocklebur*	seedling johnsongrass
crabgrass	common purslane	shattercane
crowfootgrass	common ragweed	sicklepod
fall panicum	Florida pusley	volunteer sorghum
foxtail millet	galinsoga	woolly cupgrass
giant foxtail	giant ragweed*	
goosegrass	henbit	
green foxtail	jimsonweed	
prairie cupgrass	lambsquarters	
red rice	morningglory	
signalgrass (<i>Brachiaria</i>)*	mustards	
southwestern cupgrass	nightshades	
witchgrass	pigweed	
yellow foxtail	smartweed	
yellow nutsedge*	velvetleaf*	
carpetweed	waterhemp	

*Control of these weeds can be erratic, especially under dry weather conditions. Control escaped weeds with cultivation or application of an appropriate EPA-registered postemergence herbicide. On fine-textured soils, only partial control can be expected.

**Control may be improved by following these suggested procedures:

1. **In corn**, apply up to the maximum single application rate in Table 1 or Table 2 for your given soil texture and rate limitation based on your soil conservation practices.
2. **Thoroughly till moist soil** to destroy germinating and emerged weeds. If Bicep II Magnum is to be applied preplant incorporated, this tillage may be used to incorporate Bicep II Magnum if uniform 2-inch incorporation is achieved as described under **Application Procedures**.

3. Plant crop into moist soil **immediately after tillage**. If Bicep II Magnum is to be used preemergence, apply at planting or immediately after planting.
4. If available, **sprinkler irrigate** within 2 days after application. Apply ½-1 inch of water. Use lower water volume (½ inch) on coarse-textured soils and higher volume (1 inch) on fine-textured soils.
5. If irrigation is not possible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these conditions, a uniform, shallow cultivation as soon as weeds emerge may improve control.

Bicep II Magnum Rate Limitations – Corn and Sorghum*

*Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or greater setbacks) which are different from the label, the more restrictive/protective requirements must be followed. Certain states may have established rate limitations within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

Note: For purposes of calculating total atrazine active ingredient applied, Bicep II Magnum contains 3.1 lb ai atrazine + related compounds per gal (0.775 lb ai/qt).

ATRAZINE USE RESTRICTIONS:

Bicep II Magnum contains both atrazine and S-metolachlor as active ingredients.

FOR ALL SOIL APPLICATIONS PRIOR TO CROP EMERGENCE

- **On Highly Erodible Land (as defined by the Natural Resource Conservation Service)**

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 2.58 qt/A of Bicep II Magnum (2.0 lb ai/A) as a broadcast spray.

If the soil coverage with plant residue is less than 30% at planting, a maximum of 2.1 qt/A of Bicep II Magnum (1.6 lb ai/A) may be applied.

- **On Land Not Highly Erodible**

Apply a maximum of 2.58 qt/A of Bicep II Magnum (2.0 lb ai/A) as a broadcast spray.

FOR POSTEMERGENCE APPLICATION OF ATRAZINE TO CORN

If no atrazine was applied prior to corn emergence, apply a maximum of 2.58 qt/A of Bicep II Magnum (2.0 lb ai/A) broadcast. If a postemergence treatment is required following an earlier atrazine application, the total atrazine applied may not exceed 2.5 lb active ingredient (3.2 qt of Bicep II Magnum) per acre per calendar year.

Replant and Rotational Crops

Replant Crops: If treated crop is lost due to poor germination, hail, flood, insects, etc., corn may be replanted immediately or sorghum may be replanted immediately, provided the seed has been properly treated with Concep. If the original application was banded and the second crop is planted in the untreated row middles, a second banded treatment may be applied.

Replant Crop Restriction: Do not make a second broadcast application to replanted crops.

Rotational Crops: Corn, sorghum, soybeans, cotton, or peanuts may be planted the spring following treatment.

Rotational Crop Restrictions: (1) Do not rotate to food or feed crops other than those listed above. (2) In eastern parts of the Dakotas, KS, western MN, and NE, do not rotate to soybeans for 18 months following application if the rate applied to corn or sorghum was more than 2.0 lb ai of atrazine or equivalent band application rate. (3) In the High Plains and Intermountain areas of the West, where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to follow corn or sorghum, or a crop of untreated corn or sorghum is to precede other rotational crops. (4) Do not graze or feed forage or fodder from cotton to livestock.

Rotational Crop Precautions: (1) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer. (2) If Bicep II Magnum is applied after June 10, rotating to crops other than corn or sorghum the next year may result in crop injury. (3) Avoid planting sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes the year following Bicep II Magnum application, or crop injury may occur.

Cover Crops

A cover crop can be an important tool for the overall farm cropping system. Cover crops are planted for conservation purposes, soil erosion control, soil health improvement, water quality improvement and weed management. A cover crop can be a single crop or a combination of crops, including grasses and/or broadleaf crops.

After harvest of a Bicep II Magnum treated crop, planting of a cover crop is allowed provided the cover crop is not grazed or fed to livestock nor harvested for food. Terminate the cover crop through natural causes such as frost or intentional termination by herbicide application, crimping, rolling, tillage or cutting.

All possible cover crops or cover crop combinations have not been tested for tolerance to Bicep II Magnum herbicide. Before planting the cover crop, determine the level of tolerance for the intended cover crops by conducting a field bioassay. Refer to the **Field Bioassay for Cover Crops** section for instructions.

Field Bioassay for Cover Crops

A field bioassay is a method of determining if herbicide residues are present in the soil at concentrations high enough to adversely affect crop growth.

Conduct the field bioassay by planting several strips of the desired cover crop across the field which has been previously treated with Bicep II Magnum. Plant the cover crop strips perpendicular to the direction of the Bicep II Magnum application. The strips should be located so that all the different field conditions are encountered, including differences in field terrain, soil texture, organic matter, pH, and drainage.

If the cover crop does not show adverse effects such as crop injury and/or stand reduction, the field can be planted to this cover crop. If injury and/or stand reduction are visible, wait two to four weeks for further herbicide degradation to occur and repeat the bioassay. Alternatively, select a different cover crop and repeat the bioassay. Only plant cover crops that show acceptable tolerance in the field bioassay.

CORN AND SORGHUM USE PRECAUTIONS AND RESTRICTIONS

For purposes of calculating the amount of active ingredient applied, 1 qt Bicep II Magnum contains 0.775 lb ai atrazine + related compounds and 0.6 lb S-metolachlor.

To determine the combined total lb ai of atrazine or S-metolachlor per acre resulting from all products, use the following 2-step method:

- A. Determine the lb ai of atrazine or S-metolachlor applied as Bicep II Magnum (1.0 qt = 0.775 lb ai atrazine + related compounds and 0.6 lb ai S-metolachlor); then,
- B. If Dual Magnum, Dual II Magnum or any other source of S-metolachlor is to be used, add the lb ai S-metolachlor to be applied in these products to the lb ai S-metolachlor in Step A above; or if AAtrex or any other source of atrazine is to be used, add the lb ai atrazine to be applied in these products to the lb ai atrazine + related compounds in Step A above.

Restrictions for All Bicep II Magnum Corn Applications

- The combined amount of Bicep II Magnum resulting from all applications to corn must not exceed a total of 3.23 qt/A per acre per year (1.94 lb ai/A of s-metolachlor + 2.5 lb ai/A of atrazine).
- Do not exceed 3.71 lb ai/A/year of s-metolachlor containing products
- Do not exceed 2.5 lb ai/A/year of atrazine containing products
- When tank mixing or sequentially applying atrazine or products containing atrazine, such as AAtrex, do not exceed a single application rate of 2.0 pounds active ingredient of atrazine (2.58 qt Bicep II Magnum) per acre.

- When tank mixing or sequentially applying atrazine or products containing atrazine, such as AAtrex, the total pounds of atrazine applied (lb ai) must not exceed 2.5 lb per acre per calendar year.
- Do not graze or feed field corn forage from treated areas for 60 days or sweet corn forage for 45 days following Bicep II Magnum application.
- Preharvest Interval (PHI): Do not harvest sweet corn ears from treated areas for 30 days following Bicep II Magnum application.
- Do not apply Bicep II Magnum by mechanically pressurized handguns in sweet corn.

Precautions for All Bicep II Magnum Sorghum Applications

- If sorghum seed is not properly pretreated with Concep, application of Bicep II Magnum will result in severe crop injury or death.
- Injury may occur to sorghum following the use of Bicep II Magnum under abnormally high soil moisture conditions during early development of the crop.

Restrictions for All Bicep II Magnum Sorghum Applications

- The combined amount of Bicep II Magnum resulting from all applications to sorghum must not exceed a total of 2.58 qt/A per acre per year (1.55 lb ai/A of s-metolachlor + 2.00 lb ai/A of atrazine).
- Do not exceed 1.68 lb ai/A/year of s-metolachlor containing products
- Do not exceed 2.5 lb ai/A/year of atrazine containing products
- When tank mixing or sequentially applying atrazine or products containing atrazine, such as AAtrex, do not exceed a single application rate of 2.0 pounds active ingredient of atrazine (2.58 qt Bicep II Magnum) per acre.
- When tank mixing or sequentially applying atrazine or products containing atrazine, such as AAtrex, the total pounds of atrazine applied (lb ai) must not exceed 2.5 lb per acre per calendar year.
- Do not graze or feed sorghum forage for 60 days following preemergence Bicep II Magnum use.
- Preharvest Interval (PHI): Do not harvest grain sorghum from treated areas for 75 days following Bicep II Magnum application.
- Do not apply atrazine and propazine products to the same sorghum acre.

CORN USE DIRECTIONS – EARLY PREPLANT, PREPLANT SURFACE, PREPLANT INCORPORATED, OR PREEMERGENCE APPLICATIONS

Early Preplant (Corn): Use on medium- and fine-textured soils with minimum-tillage or no-tillage systems in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, TN, WI, and WY. Apply $\frac{2}{3}$ the labeled rate of Bicep II Magnum as a split treatment 30-45 days before planting and the remainder at planting, using the rates in Table 1. Applications made less than 30 days prior to planting may be as either a split or single treatment. Use the lower rate for light expected weed infestations and the higher rate for heavy expected weed infestations. On coarse-textured soils, apply 2.1 qt/A of Bicep II Magnum not more than 2 weeks prior to planting. The above procedure may be followed if AAtrex, Dual Magnum, Dual II Magnum, or Princep is used in tank mixtures with Bicep II Magnum. Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, apply in a tank mixture combination with a burndown herbicide (for example, Gramoxone brands, or solo glyphosate brands). Observe all directions for use, precautions, and restrictions on the label of the burndown herbicide.

On medium- and fine-textured soils with minimum- or no-tillage systems in DE, MD, MI, NY, OH, PA, VA, and WV, early preplant applications may be applied following the directions for use above. If the amount of rainfall results in unsatisfactory length of weed control following the earlier treatment, a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide may be used. If the postemergence treatment includes the herbicide used early preplant, do not exceed the labeled rate for corn on a given soil texture. Observe all directions for use, precautions, restrictions and limitations on the label of the postemergence herbicide.

Bicep II Magnum may be used according to the above directions to control winter wheat planted as a cover crop in IN, KY, and OH, in addition to providing residual weed control. The wheat must be less than 6 inches tall (preferably still in a dormant or semi-dormant state coming out of winter) at the time of application. Depending on rainfall, 10-20 days may be required to completely kill the wheat. In the event that adequate rainfall does not occur, control of the winter wheat may be unsatisfactory and the application of a burndown herbicide (i.e., Gramoxone brands, or solo glyphosate brands) may be required before planting the crop.

Bicep II Magnum may be applied in the fall, as a single application, for control of the winter weeds listed on this label within the ecofallow (no-till) production areas of NE and KS where wheat (or other small grain cereals) will be rotated to corn. Make the application to untilled wheat stubble in the fall following wheat harvest, but before soil freeze-up. The ground must remain untilled through the establishment of the corn crop.

Restriction: Users must only apply to fallow land in the production areas of NE and KS where a Wheat-Corn-Fallow production system is in use, where the next rotated crop is corn.

On medium- and fine-textured soils following final seedbed preparation in the Blacklands and Gulf Coast areas of TX, an early preplant application of Bicep II Magnum at 1.6-1.9 qt/A may be made 30-45 days before planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application. A follow-up application of Dual Magnum, or Dual II Magnum may be needed in fields with a history of heavy grass pressure. Apply after planting, but before corn and grass weeds emerge.

Read and follow all restrictions in the **Restrictions for All Bicep II Magnum Corn Applications** section above.

Precaution: Avoid soil incorporation or disturbing the soil after Bicep II Magnum application and before planting. Moving treated soil out of the row or moving untreated soil to the surface during planting will result in diminished weed control.

Table 1: Bicep II Magnum – Early Preplant – Corn¹

Soil Texture	Single Application	Split Application*	
		30-45 DBP**	At Planting
COARSE Sand, loamy sand, sandy loam	2.1 qt/A	DO NOT APPLY	
MEDIUM Loam, silt loam, silt	2.1-2.58 qt/A	1.4-1.75 qt/A	0.7-0.9 qt/A
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58 qt/A	1.4-1.75 qt/A	0.7-0.9 qt/A

*Split applications can be made less than 30 days before planting if desired.

**DBP – Days before planting

¹Do not exceed 2.1 qt/A on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

Preplant Surface, Preplant Incorporated, or Preemergence: Apply Bicep II Magnum preplant surface, preplant incorporated, or preemergence, using the appropriate rates from Table 2.

Preplant Surface: Apply uniformly to the soil surface within 14 days before planting. Where applications are made to coarse soils more than 7 days before planting, use the rates in Table 1 for corn.

Preplant Incorporated: Apply to the soil and incorporate into the top 2 inches of the soil within 14 days before planting, using a finishing disk, finishing harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use

the preplant incorporated method if furrow irrigation is used or when a period of dry weather after application is expected. If crop is to be planted on beds, apply and incorporate after bed formation.

Preemergence: Apply to the soil surface at planting (behind the planter) or after planting, but before weeds or crop emerge.

Table 2: Bicep II Magnum – Preplant Surface, Preplant Incorporated, or Preemergence – Corn

Soil Texture	Broadcast Rate Per Acre	
	Less Than 3% Organic Matter	3% Organic Matter or Greater
COARSE Sand, loamy sand, sandy loam	1.3 qt	1.6 qt
MEDIUM Loam, silt loam, silt	1.6 qt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1 qt	2.1-2.58 qt* ¹
Muck or peat soils (more than 20% organic matter)	DO NOT USE	

*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter: Apply 2.58 qt of Bicep II Magnum per acre.

¹Do not exceed 2.1 qt/A on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

Precautions: In the event of escape of annual weeds following an early preplant, preplant surface, preplant incorporated, or preemergence treatment of Bicep II Magnum applied alone or in combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide. If the postemergence treatment includes the herbicide used in the earlier treatment, do not exceed the labeled rate for corn on a given soil texture.

Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present, add a contact herbicide as noted in the **Bicep II Magnum Tank Mixtures** section of this label.

Read and follow all restrictions in the **Restrictions for All Bicep II Magnum Corn Applications** section above.

SORGHUM USE DIRECTIONS – EARLY PREPLANT, PREPLANT SURFACE, PREPLANT INCORPORATED, OR PREEMERGENCE APPLICATIONS

Early Preplant (Sorghum-Seed Treated with Concep): For minimum-tillage and no-tillage systems only, Bicep II Magnum may be applied up to 45 days before planting grain sorghum in IA, IL, eastern KS, MO, NE, and SD, using the rates in Table 3. Use only split applications for treatments made 30-45 days before planting with $\frac{2}{3}$ the labeled rate applied initially and the remaining $\frac{1}{3}$ at planting. Applications made less than 30 days prior to planting may be made as either a split or single application.

Substitute a fluid fertilizer for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Gramoxone brands, or solo glyphosate brands). Observe all directions for use, precautions, and restrictions on the label of the contact herbicide. Under dry conditions, irrigate after application to move Bicep II Magnum into the soil.

On medium- and fine-textured soils following final seedbed preparation in the Blacklands, Panhandle, and Gulf Coast areas of TX, an early preplant application of Bicep II Magnum at 1.6-1.9 qt/A may be made 30-45 days before planting. Grass suppression of 2-3 weeks after planting can be expected as a result of this application. A follow-up application of a Dual Magnum, or Dual II Magnum product may be needed in fields with a history of heavy grass pressure. Apply after planting, but before sorghum and grass weeds emerge.

Read and follow all precautions and restrictions in the **Precautions for All Bicep II Magnum Sorghum Applications** and **Restrictions for All Bicep II Magnum Sorghum Applications** sections above.

Precaution: Avoid soil incorporation or disturbing the soil after Bicep II Magnum application and before planting. Moving treated soil out of the row or moving untreated soil to the surface during planting will result in diminished weed control.

Restrictions: (1) Do not use on soils with a pH greater than 8.0 if grain sorghum is to be planted. (2) Do not use on coarse soils. (3) Do not use on medium soils with less than 1.0% organic matter.

Table 3: Bicep II Magnum – Early Preplant – Grain or Forage Sorghum (Seed treated with Concep)¹

Soil Texture	Organic Matter Content	Single Application	Split Application*	
			30-45 DBP**	At Planting
COARSE Sand, loamy sand, sandy loam	any level	DO NOT USE	DO NOT USE	

MEDIUM Loam, silt loam, silt	more than 1.0%	2.1-2.33 qt/A	1.4-1.6 qt/A	0.7-0.8 qt/A
	less than 1.0%	DO NOT USE	DO NOT USE	
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	more than 1.0%	2.1 qt/A	1.4 qt/A	0.7 qt/A
	1.0%-1.5%	2.1-2.33 qt/A	1.4-1.6 qt/A	0.7-0.8 qt/A
	more than 1.5%	2.33-2.58 qt/A	1.6-1.75 qt/A	0.8-0.9 qt/A

*Split applications can be made less than 30 days before planting if desired.

**DBP – Days before planting

¹Do not exceed 2.1 qt/A on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

Preplant Surface, Preplant Incorporated, or Preemergence to Sorghum (Seed Treated with Concep): Apply Bicep II Magnum preplant surface, preplant incorporated, or preemergence, using the appropriate rates from Table 4.

Preplant Surface: Apply uniformly to the soil surface within 14 days before planting.

Preplant Incorporated: Apply to the soil and incorporate into the top 2 inches of the soil within 14 days before planting, using a finishing disk, finishing harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use the preplant incorporated method if furrow irrigation is used or when a period of dry weather after application is expected. If crop is to be planted on beds, apply and incorporate after bed formation.

Preemergence: Apply to the soil surface at planting (behind the planter) or after planting, but before weeds or crop emerge.

Precaution: In the event of escape of annual weeds following an early preplant, preplant surface, preplant incorporated, or preemergence treatment of Bicep II Magnum applied alone or in combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide. If the postemergence treatment includes the herbicide used in the earlier treatment, do not exceed the labeled rate for sorghum on a given soil texture.

Table 4: Bicep II Magnum – Preplant Surface, Preplant Incorporated, or Preemergence – Grain or Forage Sorghum (Seed treated with Concep)

Soil Texture	Organic Matter	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	any level	DO NOT USE
MEDIUM and FINE Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	less than 1.0%	DO NOT USE
	more than 1.0%	1.6 - 2.1 qt

Read and follow all sorghum related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

Restrictions: (1) Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas. (2) Do not apply preplant incorporated in AZ or the Imperial Valley of CA.

A fluid fertilizer may be substituted for some or all of the water carrier for burndown of existing annual weeds listed on this label up to the 2-leaf stage of development. The addition of crop oil concentrate to the spray mixture will enhance the burndown activity. If larger weeds are present at the time of treatment, add a contact herbicide as noted in the **Bicep II Magnum Tank Mixtures** section of this label.

Precautions: (1) Avoid applying Bicep II Magnum on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed, or crop injury may result. (2) Avoid applying Bicep II Magnum when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow. (3) Avoid applying to sorghum grown under dry mulch tillage, or crop injury may result. (4) Injury may occur if both Bicep II Magnum applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used. (5) Sorghum growing under stress caused by minor element deficiency may be injured by Bicep II Magnum.

CORN USE DIRECTIONS – POSTEMERGENCE AND POST DIRECTED APPLICATIONS

Postemergence Broadcast – Corn

Weeds Controlled		Weeds Partially Controlled
barnyardgrass (watergrass)	kochia	yellow nutsedge
cocklebur	lambsquarters	
common ragweed	morningglory	
crabgrass	mustard	
crowfootgrass	pigweed	
fall panicum	prickly sida	
flixweed	purslane	
giant foxtail	smartweed	
green foxtail	velvetleaf	
yellow foxtail	waterhemp	
jimsonweed		

Application: Apply early postemergence, using the appropriate rate from Table 5. Apply this treatment before grass and broadleaf weeds pass the 2-leaf stage and before corn exceeds 12 inches in height. Occasional corn leaf burn may result, but this is unlikely to affect later growth or yield.

Precautions: (1) Application to weeds larger than the 2-leaf stage will likely result in unsatisfactory control. (2) Avoid applying postemergence in fluid fertilizer, or severe crop injury may occur.

Table 5: Bicep II Magnum Postemergence Broadcast – Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.6 qt
MEDIUM Loam, silt loam, silt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58 qt*

*For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.58 qt of Bicep II Magnum per acre.

Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

Postemergence-Directed – Corn

Bicep II Magnum may be applied at 1.3-2.58 qt/A in a minimum of 15 gal of water as a postemergence-directed treatment to corn to extend control of weeds listed in the **Early**

Preplant, Preplant Surface-Applied, Preplant Incorporated, Preemergence, or Postemergence Broadcast section of this label. Apply using the appropriate rate from Table 6.

For best results, apply Bicep II Magnum to weed-free soil following use of a preplant surface, preplant incorporated, or preemergence herbicide, or following a lay-by cultivation. If weeds have emerged at the time of Bicep II Magnum application, apply before grass and broadleaf weeds exceed the 2-leaf stage. Apply to corn not exceeding 12 inches in height. Minimize contact with corn leaves.

Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

Precautions: (1) Application to weeds larger than the 2-leaf stage will likely result in unsatisfactory control. (2) Avoid postemergence application in fluid fertilizer, or severe crop injury may result.

Table 6: Postemergence-Directed – Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.3 qt
MEDIUM Loam, silt loam, silt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58 qt*

*For better residual control of cocklebur, velvetleaf, and yellow nutsedge on fine-textured soils above 3% organic matter, apply 2.58 qt of Bicep II Magnum per acre. Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

SORGHUM USE DIRECTIONS – POSTEMERGENCE APPLICATION

Bicep II Magnum may be applied postemergence to Concep III treated forage or grain sorghum for control of several grass and broadleaf weeds. For a list of weeds controlled, refer to the **Corn Use Directions – Postemergence and Post Directed Applications** section on this label.

Make the application to grass and broadleaf weeds before they exceed the 2-leaf stage. Apply to sorghum from the 3-leaf stage (3 visible collars) up to 12 inches in height. Occasional sorghum leaf burn may result, but this is unlikely to affect later growth or yield.

Apply early postemergence at the appropriate rate from Table 7. Use only water as the carrier.

For best results, add a crop oil concentrate (COC) type adjuvant at a rate of 1% v/v (1 gallon COC/100 gallons spray solution) to the spray solution. In addition to COC, a spray grade Urea Ammonium Nitrate (UAN) at a rate of 2.5% v/v (2.5 gallons UAN/100 gallons spray solution) or ammonium sulfate (AMS) at a rate equivalent to 8.5 lb/100 gallons of spray solution can be added to the spray solution.

Bicep II Magnum may be tank mixed with other herbicides registered on sorghum for improved spectrum of weed control. Additionally, these tank mixtures can be used to include a herbicide with a different mode of action to help control or manage the development of resistant weed biotypes. Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of weeds controlled.

Bicep II Magnum can be applied as part of a sequential sorghum weed control program. If Bicep II Magnum was applied prior to sorghum emergence, a second treatment of Bicep II Magnum can be applied postemergence provided that the total Bicep II Magnum rate during any one crop does not exceed 2.58 qt/A.

Table 7: Bicep II Magnum Postemergence Broadcast – Sorghum

Soil Texture	Broadcast Rate Per Acre*
COARSE (Sand, loamy sand, sandy loam)	1.3–1.6 qt
MEDIUM (Loam, silt loam, silt)	1.6–2.1 qt
FINE (Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay)	2.1–2.58 qt

*Apply the higher rate in the rate range on soils with higher organic matter (>3%) or for additional residual weed control.

Read and follow all sorghum related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section above.

Precautions:

- Application to weeds larger than the 2-leaf stage will likely result in unsatisfactory control.
- Avoid applying postemergence in fluid fertilizer, or severe crop injury may occur.
- Application to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calcareous soil may result in crop injury.

SPRAY EQUIPMENT

Ground Application: Use sprayers that provide accurate and uniform application. Ensure that screens in nozzles and in suction and in-line strainers are no finer than 50-mesh. Use a pump with capacity to: (1) maintain 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Unless otherwise specified, use a minimum of 10 gal of spray mixture per acre. Rinse sprayer thoroughly with clean water immediately after use.

For band applications, calculate amount to be applied per acre as follows:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \quad \times \quad \text{broadcast rate per acre} \quad = \quad \text{amount needed per acre of field}$$

Low Carrier Application (Broadcast Ground Application Only): Use sprayers with properly spaced nozzles that provide accurate and uniform application. **Only water may be used as a carrier.** Ensure that screens in suction and in-line strainers are 50-mesh. Manufacturers may require that tip screens as fine as 100-mesh be used with some nozzles. Use a pump with capacity to: (1) maintain up to 35-40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5.0 gal of spray mixture per acre. Maintain uniform travel speed while spraying. Rinse sprayer thoroughly with clean water immediately after each use.

Use appropriate nozzles to reduce drift and increase application accuracy. Use nozzle screens when directed by the manufacturer. Place all nozzles on 20-inch centers, except flooding types. Place flooding type nozzles on 40-inch centers. When Flat Fan-type nozzles are used, place at angles of 80° or 110°. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles or tips.

Aerial Application (For Bicep II Magnum Alone): Use aerial application only where broadcast applications are specified. Use the appropriate amount of this product in sufficient water to equal a minimum of 2.0 gal/A of total spray. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to the label directions, make applications at a maximum height of 10 ft above the top of the largest plants, using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 15 mph.

Avoid application to humans or animals. Ensure that flagmen and loaders avoid inhalation of spray mist and prolonged contact with skin.

SPRAY DRIFT MANAGEMENT

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572).
- If the windspeed is 10 miles per hour or less, applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use $\frac{3}{4}$ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 mph at the application site. If the windspeed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed-wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.
- User must maintain a 150 foot (46 m) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments

Ground Boom Applications

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- User must maintain a 15 foot (4.6 m) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments

Boomless Ground Applications

- Applicators are required to use a coarse or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- User must maintain a 15 foot (4.6 m) in-field downwind buffer (in the direction in which the wind is blowing) from the edge of streams and rivers, as well as high-tide line for all estuarine/marine environments

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

- For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT – Aircraft

- Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

- Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source

or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

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.

Boomless Ground Applications

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications

- Take precautions to minimize spray drift.

MIXING PROCEDURES

Shake 2.5 gal jugs well or thoroughly recirculate larger containers and bulk tanks before using. Bicep II Magnum is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. Bicep II Magnum may also be sprayed onto dry bulk granular fertilizer and applied with the granular fertilizer.

Dry Bulk Granular Fertilizers

Many dry bulk granular fertilizers may be impregnated or coated with Bicep II Magnum and used to control weeds in corn or Concep-treated sorghum.

When applying Bicep II Magnum with dry bulk granular fertilizers, follow all directions for use, restrictions and precautions on the Bicep II Magnum label regarding target crops, rates per acre, soil texture, application methods, and rotational crops.

Restrictions:

- Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited.
- The impregnation of dry bulk commercial fertilizer is restricted to 340 tons per worker per day for no more than 30 days per calendar year for use on corn and sorghum.
- The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the user (applicator) of the dry bulk fertilizer that:
 - Applicators must wear long-sleeved shirt, long pants, shoes, and socks
 - The restricted entry interval is 24 hours

All individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

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

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

Calculate the amount of Bicep II Magnum to be used by the following:

$$\frac{\text{tons of fertilizer}}{\text{acre}} \quad \times \quad \text{qt of Bicep II Magnum per acre} \quad = \quad \text{qt of Bicep II Magnum per ton of fertilizer}$$

Pneumatic (Compressed Air) Application

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix Bicep II Magnum with Exxon Aromatic 200 at a rate of 2.0-2.5 pt/gal of Bicep II Magnum. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Do not use drying agents when using Aromatic 200.

Precautions: (1) Use mixtures of Bicep II Magnum and Aromatic 200 on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications. (2) When impregnating Bicep II Magnum in a blender before application, a drier mixture can be attained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or another drying agent of 6/30 particle size is preferred. (3) Drying agents are not endorsed for use with On-The-Go impregnation equipment.

Precautions: To avoid potential for explosion, (1) Do not impregnate Bicep II Magnum on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine Bicep II Magnum with a single superphosphate (0-20-0) or treble superphosphate (0-46-0). (3) Do not use Bicep II Magnum on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application

Apply 200-700 lb of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential in order to prevent possible crop injury or injury to subsequent rotational crops. Nonuniform application may also result in unsatisfactory weed control. To obtain satisfactory weed control in areas where conventional tillage is practiced, shallowly incorporate the mixture into the soil. On fine- or medium-textured soils in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional till situations, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On coarse-textured soils, make applications approximately 14 days prior to planting.

Precautions: (1) To help avoid rotational crop injury, make applications as early as possible, since Bicep II Magnum impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when Bicep II Magnum is applied as a spray in water or fluid fertilizer. (2) Avoid use of the herbicide/fertilizer mixture on crops where planting beds are to be formed, or crop injury may occur.

Application in Water or Fluid Fertilizers

Bicep II Magnum Alone: Fill the spray tank $\frac{1}{2}$ - $\frac{3}{4}$ full with water or fluid fertilizer, add the proper amount of Bicep II Magnum, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Tank Mixtures: Fill the spray tank $\frac{1}{2}$ - $\frac{3}{4}$ full with water or fluid fertilizer, add the proper amount of Bicep II Magnum, then add AAtrex, Banvel®, Linuron, or Princep; next add Dual Magnum, or Dual II Magnum; then add Gramoxone brands, or solo glyphosate brands, depending on the tank mix combination desired; and finally, add the rest of the water or fluid fertilizer. Only water may be used with Bicep II Magnum + Liberty® Herbicide when applied postemergence to corn designated as tolerant to Liberty (glufosinate); and with solo glyphosate brands when applied postemergence to corn designated as glyphosate-tolerant (e.g. Agrisure® or Roundup Ready®). Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Compatibility Test

Perform a jar test before tank mixing to ensure compatibility of Bicep II Magnum with other pesticides. The following test assumes a spray volume of 25 gal/A. For other spray volumes, make appropriate changes in the ingredients.

Note: Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray. Because liquid fertilizers vary, even within the same analysis, **always check compatibility with pesticide(s) before use.** Incompatibility of tank mixtures is more common with suspensions of fertilizer and pesticides.

Test Procedure

1. Add 1.0 pt of carrier (fertilizer or water) to each of 2 one qt jars with tight lids.
Note: Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.
2. To one of the jars, add ¼ tsp or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (¼ tsp is equivalent to 2.0 pt/100 gal spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of pesticide(s) in their relative proportions based on label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15-30 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) slurry the dry pesticide(s) in water before addition, or (b) add ½ the compatibility agent to the fertilizer or water and the other ½ to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the **Storage and Disposal** section in this label.

CORN USE DIRECTIONS – BICEP II MAGNUM TANK MIXTURES

Read and follow all corn related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section of this label. Additionally, always follow label instructions for tank mix products when mixing with Bicep II Magnum. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, 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.

When tank mixing Bicep II Magnum with AAtrex formulations, refer to the **Bicep II Magnum Rate Limitations** section of this label. Do not exceed the following:

On highly erodible land with less than 30% plant residue cover prior to crop emergence	1.6 lb ai of atrazine
On other land prior to crop emergence	2.0 lb ai of atrazine
Postemergence applications only – any land	2.0 lb ai of atrazine
Preemergence + postemergence applications	2.5 lb ai of atrazine

Tank Mixture with AAtrex, Dual Magnum, Dual II Magnum or Princep

AAtrex (4L or Nine-O®): Add up to 1.0 qt of AAtrex 4L (1.1 lb of Nine-O) per acre to the rate of Bicep II Magnum labeled in Table 2 (do not exceed the above atrazine limit) in the southeastern U.S. where high rainfall can shorten the duration of control of broadleaf weeds, and in all areas where heavy infestations of cocklebur, morningglory, velvetleaf, or other broadleaf weeds claimed are expected.

Dual Magnum Products: Add up to 0.33 pt of Dual Magnum or Dual II Magnum per acre to the rate of Bicep II Magnum labeled in Table 2 when heavy infestations of yellow nutsedge, sandbur, or seedling johnsongrass are expected.

Princep (4L or Caliber 90®): Add up to 1.0 qt of Princep 4L (1.1 lb of Caliber 90) per acre to the rate of Bicep II Magnum labeled in Table 2 where heavy infestations of crabgrass or fall panicum are expected or additional control of certain broadleaves is desired.

Tank Mixture of Bicep II Magnum Alone or Bicep II Magnum + AAtrex, Dual Magnum, Dual II Magnum, or Princep, with Gramoxone Brands, or Solo Glyphosate Brands

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, tank mix the contact herbicides Gramoxone brands, or solo glyphosate brands with Bicep II Magnum alone or with Bicep II Magnum + AAtrex, Dual Magnum, Dual II Magnum, or Princep. When used as directed, the Gramoxone brands portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Solo glyphosate brands will control emerged annual and perennial weeds when applied as directed on its label. The Bicep II Magnum portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Bicep II Magnum Alone** section for corn. The addition of AAtrex, Dual Magnum, Dual II Magnum, or Princep offers the advantage indicated above.

Application: Apply before, during, or after planting, but before corn emerges, at the appropriate rate in Table 8. Up to 0.75 qt of AAtrex 4L (0.8 lb of Nine-O), or 0.33 pt of Dual Magnum or Dual II Magnum or 1.0 qt of Princep 4L (1.1 lb of Caliber 90) per acre may be added to the rate of Bicep II Magnum labeled in Table 8. Add Gramoxone brands or solo glyphosate brands at labeled rates.

Apply in 20-60 gal of water per acre with conventional spray equipment.

Tank Mixture of Bicep II Magnum Alone or Bicep II Magnum + AAtrex, or with 2,4-D or 2,4-D + Banvel

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, Bicep II Magnum may be applied in combination with AAtrex. When used as directed, the Bicep II Magnum portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Bicep II Magnum Alone** section for corn.

Application: Apply Bicep II Magnum before, during, or after planting, but before corn emerges, at the appropriate rate in Table 8. Up to 0.75 qt of AAtrex 4L (0.8 lb of Nine-O) per acre may be added to the rate of Bicep II Magnum labeled in Table 8.

For control of broadleaf weeds or where heavy crop residues exist, add an appropriately labeled 2,4-D amine or low volatile ester to the spray tank last and apply in a minimum of 25 gal of carrier per acre.

As carriers, nitrogen solutions and complete liquid fertilizers, applied before corn emergence, enhance burndown of existing weeds, and therefore, are preferred instead of water. Add a non-ionic surfactant (NIS) at 1.0-2.0 qt/100 gal of diluted spray, or another surfactant cleared for use on growing crops at its labeled rate. Apply before weeds exceed 3 inches in height. If alfalfa is present, add Banvel to the spray mixture at 0.33-0.5 pt/A and apply before alfalfa exceeds 6 inches in height.

For fields with existing sod grasses (e.g., bromegrass, orchardgrass, rye, or timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add Gramoxone brands at the rate of 2.5 pt/A in place of, or in addition to, 2,4-D as indicated above. Do not apply Gramoxone brands in suspension-type liquid fertilizer. Observe all directions for use, precautions, restrictions and limitations on the respective product labels when applying these products in tank mix combination.

Table 8: Bicep II Magnum for Minimum-Tillage or No-Tillage Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.6 qt
MEDIUM Loam, silt loam, silt	2.1 qt
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.1-2.58 qt* ¹
Muck or peat soils	DO NOT USE

*For cocklebur, yellow nutsedge, and velvetleaf control on fine-textured soils above 3% organic matter, apply 2.58 qt of Bicep II Magnum per acre.

¹Do not exceed 2.1 qt/A on highly erodible land with less than 30% plant residue cover. Control of certain weeds may be reduced and a tank mix partner or an application of a postemergence herbicide may be needed.

Tank Mixtures For Postemergence Weed Control in Field Corn

For postemergence control of weeds in specific types of field corn, the combinations listed below with Bicep II Magnum may be used. Full season weed control from early preplant, preplant incorporated, or preemergence treatments can lead to maximum yield potential under competition-free conditions. However, if control of emerged weeds is needed, a postemergence program as listed below can be used to provide residual control for the remainder of the season.

Follow all label directions, instructions, precautions, restrictions and limitations for each product. For each tank mixture with Bicep II Magnum, apply only to the specific field corn type specified on the tank mix product label.

Precautions: (1) Use of fluid fertilizer with these mixtures may result in corn injury. (2) In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall.

A. Bicep II Magnum + Liberty or Ignite® 280 SL Herbicide for Postemergence Use in LibertyLink® Corn - The tank mixture of Bicep II Magnum + Liberty or Ignite 280 SL Herbicide can be applied postemergence to weeds and corn from seed designated as LibertyLink or corn warranted by Bayer CropScience as being tolerant to Liberty Herbicide. Liberty or Ignite 280 SL Herbicide provides postemergence control of a broad spectrum of grass and broadleaf weeds and the Bicep II Magnum provides residual control of grasses and broadleaf weeds listed in the label section **Bicep II Magnum Applied Alone - Weeds Controlled**. For the proper rate of Bicep II Magnum applied postemergence with Liberty or Ignite 280 SL Herbicide, refer to Table 5 and use the minimum rate per soil

texture for season-long residual control. Refer to the Liberty or Ignite 280 SL Herbicide label for the postemergence application rate according to weed species and their maximum height at the time of postemergence application. Where multiple weed species are present, use the highest Liberty or Ignite 280 SL Herbicide rate labeled to control the species and growth stages present.

Follow all applicable use directions, limitations, precautions, restrictions and information regarding application to corn on the Bicep II Magnum and Liberty or Ignite 280 SL Herbicide labels.

- B. Bicep II Magnum + Solo Glyphosate Brands for Postemergence Application to Glyphosate-Tolerant Corn (e.g. Agrisure or Roundup Ready)** - The tank mixture of Bicep II Magnum + solo glyphosate brands can be applied postemergence to weeds and to corn designated as glyphosate-tolerant. Application may be applied postemergence to glyphosate-tolerant corn up to 12 inches in height. This mixture will provide postemergence control of weed species on the solo glyphosate brand label, and also residual control of weed species on the Bicep II Magnum label. Use the minimum Bicep II Magnum rate postemergence with solo glyphosate brands in glyphosate-tolerant corn as specified in Table 5 of this label. Refer to each product label and follow all appropriate use directions, application procedures, precautions, restrictions and limitations. Apply solo glyphosate brands for control of labeled broadleaf and grass weeds. Refer to the solo glyphosate brand label for directions to control problem species.
- C. Bicep II Magnum + Spirit®** - Apply 1.33-1.75 qt/A of Bicep II Magnum + 1.0 oz/A of Spirit to corn that is 4-12 inches tall. The application may be broadcast, semi-directed, or directed. The Bicep II Magnum rate is based on soil texture with 1.33 qt/A on coarse and 1.75 qt/A on medium and fine soils. Add a nonionic surfactant at 0.25% v/v. This mixture is effective for control of many annual and broadleaf weeds and some grasses. A few instances of broadleaf weed control antagonism have been observed with this combination. Control of certain annual grasses can be improved with the addition of Accent®.

Precautions: (1) Avoid using fertilizer or crop oil concentrate with these mixtures or injury to field corn may occur. (2) Combining Bicep II Magnum with other products not listed above for postemergence weed control in corn is not endorsed. (3) **These combinations may cause injury and/or weed control concerns that would not exist when the products are used separately.** A certain inherent risk is involved with the various combinations of these products used postemergence in corn. [Early preplant, preplant incorporated, or preemergence control of these weeds would usually provide more timely weed control resulting in higher yields than total postemergence treatments.]

Mixing Order

Add these products to the tank mix in the following order:

1. Products in water-soluble bags first
2. Bicep II Magnum
3. Additives

Follow all label instructions, precautions, and restrictions for individual products when making these applications to field corn.

Precautions: (1) When Bicep II Magnum is applied after June 10, crop injury may occur the following year if you rotate to crops other than corn or sorghum. (2) In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall.

SORGHUM USE DIRECTIONS – BICEP II MAGNUM TANK MIXTURES

Bicep II Magnum may be applied to grain or forage sorghum in the tank mixtures described in this section provided the sorghum seed was treated with Concep. Read and follow all sorghum related precautions and restrictions in the **Corn and Sorghum Use Precautions and Restrictions** section of this label. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions, limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank Mixture of Bicep II Magnum with Gramoxone Brands or Solo Glyphosate Brands for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where grain sorghum is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Gramoxone brands, or solo glyphosate brands, may be tank mixed with Bicep II Magnum. When used as directed, the Gramoxone brands portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Solo glyphosate brands will control emerged annual and perennial weeds when applied as directed on its label. The Bicep II Magnum portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Bicep II Magnum Applied Alone** section.

Refer to the label of each product used in combination and observe the planting details, restrictions, and all other precautions and limitations.

Application: Apply before, during, or after planting, but before grain sorghum emerges, at the appropriate rate in Table 9. Add Gramoxone brands or solo glyphosate brands at labeled rates.

Apply in a minimum of 20 gal of water per acre with conventional spray equipment.

Table 9: Bicep II Magnum for Minimum-Tillage or No-Tillage Grain Sorghum (Seed treated with Concep)

Soil Texture	Organic Matter	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	any level	DO NOT USE
MEDIUM and FINE Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	less than 1.0%	DO NOT USE
	1.0-1.5%	1.6 qt
	more than 1.5%	1.8-2.1 qt

Restrictions: (1) Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas. (2) Do not apply preplant incorporated in AZ or the Imperial Valley of CA. (3) Postemergence applications to sorghum must be made before the crop reaches 12 inches in height.

Precautions: (1) Avoid applying Bicep II Magnum on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed or crop injury may result. (2) Avoid applying Bicep II Magnum when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow. (3) Avoid applying to sorghum grown under dry mulch tillage or crop injury may result. (4) Injury may occur if both Bicep II Magnum applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used. (5) Sorghum growing under stress caused by minor element deficiency may be injured by Bicep II Magnum.

Rotational Crops: Follow the crop rotation instructions in the **Bicep II Magnum Alone** section.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a dry and cool place. Do not irradiate directly with sunlight.

Pesticide Disposal

Open dumping is prohibited. 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 [equal to or less than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

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. If the container is damaged and leaking or material has been spilled follow these procedures:

1. Cover spill with absorbent material.
2. Sweep into disposal container.
3. Wash area with detergent and water and follow with clean water rinse.
4. Do not allow to contaminate water supplies.
5. Dispose of according to instructions.

Container Handling [greater than 5 gallons]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty the

remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities. If the container is damaged, leaking, or obsolete, contact Syngenta Crop Protection, LLC at 1-800-888-8372.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

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. If the container is damaged and leaking or material has been spilled follow these procedures:

1. Cover spill with absorbent material.
2. Sweep into disposal container.
3. Wash area with detergent and water and follow with clean water rinse.
4. Do not allow to contaminate water supplies.
5. Dispose of according to instructions.

AAtrex®, AAtrex Nine-O®, Agrisure®, Bicep II Magnum®, Concep®, Dual Magnum®, Dual II Magnum®, Gramoxone®, Princep®, Princep Caliber 90®, Spirit®, the ALLIANCE FRAME, the Syngenta logo and the PURPOSE ICON are Trademarks of a Syngenta Group Company

Accent® trademark of E. I. DuPont de Nemours and Company, Inc.

Agsorb® trademark of Oil-Dri Corporation

Banvel® trademark of BASF Corporation

Celatom MP-79® trademark of Eagle-Picher Industries, Inc.

Compex® trademark of KALO Agricultural Chemicals, Inc.

Ignite® 280 SL, Liberty®, and LibertyLink® and Roundup Ready® trademarks of Bayer CropScience

Unite® trademark of HACO, Inc.

©20XX Syngenta

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.
--

Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 817A

Bicep II Magnum 817 MAS 0917 AMEND-D NOV2020-CL – di – 9/8/2021
000100-00817.20201112D.BICEP_II_MAGNUM-AMEND-NOV2020-CL.PDF