

ACCEPTED  
FOR REGISTRATION

August 26, 2022

Classified for  
"RESTRICTED USE"  
in New York State  
under 6NYCRR Part 326

New York State Department  
of Environmental Conservation  
Division of Solid & Hazardous Materials  
Pesticide Product Registration

Doc. ID 582742

**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.

PULL HERE  
TO OPEN

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

ATRAZINE GROUP 5 HERBICIDE

S-METOLACHLOR GROUP 15 HERBICIDE



# Bicep Lite II Magnum<sup>®</sup>

## Herbicide

syngenta<sup>®</sup>

For weed control in corn and grain or forage sorghum

*Active Ingredients:*

Atrazine (CAS No. 1912-24-9) . . . . .	28.1%
Atrazine related compounds . . . . .	0.6%
S-metolachlor (CAS No. 87392-12-9) . . . . .	35.8%

*Other Ingredients:* . . . . . 35.5%

*Total:* . . . . . 100.0%

Bicep Lite II Magnum contains 2.67 lb atrazine + related per gallon and 3.33 lb of S-metolachlor active ingredient per gallon.

Bicep Lite II Magnum Herbicide 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. 100-827

EPA Est. 100-LA-001<sup>GBL</sup> EPA Est. 11773-IA-01<sup>VWC</sup>

(Superscript is the first three letters of batch code on container)

SCP 827A-L3N 1121  
4150606

**2.5 gallons**  
Net Contents



<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOTLINE NUMBER</b> For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call <b>1-800-888-8372</b>	

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with eyes, skin, 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 must wear:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, and neoprene rubber ≥14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant apron when mixing/loading, cleaning equipment, or otherwise exposed to the concentrate.
- Chemical-resistant headgear if overhead exposure.

See engineering controls for additional requirements.

*continued...*

## **PRECAUTIONARY STATEMENTS (continued)**

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 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.

Fluggers 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 are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

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)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### **User Safety Recommendations**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/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 washwater 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 Lite 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 if used in areas where soils are permeable, particularly where the water table is shallow.

### **Surface Water Advisory**

This product may impact surface water quality due to runoff of rain water or 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**

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Check-valves or antisiphoning devices must be used 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 washwater, 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 practice 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 Limitations of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## DIRECTIONS FOR USE

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

### ENDANGERED SPECIES

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. Use of this product in a manner inconsistent with the label may pose a hazard to endangered or threatened species. 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](mailto: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](http://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.

Bicep Lite II Magnum must be used only in accordance with directions on this label or in separately published EPA accepted supplemental labeling directions 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-sleeved shirt and short pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE 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 Lite II Magnum is a selective herbicide to be used before planting, before or after emergence (see directions) for control of most annual grasses and broadleaf weeds in corn. Bicep Lite 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 by the seed company with Concep®. This product may be tank mixed with Balance® PRO, Banvel®, Dual Magnum® formulations, Lorox® or equivalent, or Princep® 4L (Princep® Caliber 90®) for weed control in conventional tillage corn. This product may also be tank mixed with other herbicides specified on this label for weed control in conventional, minimum-till, and no-till corn, grain sorghum, or forage sorghum.

**Note:** Tank mixtures are permitted only in those states where the tank mix partner is registered. Refer to and follow the label of each product used for precautionary statements, directions for use, geographic and other restrictions.

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 Lite 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, use Bicep Lite II Magnum in combination or in sequence with registered herbicides which do not contain triazines. Consult with your State Agricultural Extension Service for specific recommendations.

*Precautions: (1) If sorghum seed is not properly pretreated with Concep, Bicep Lite II Magnum will severely injure the crop. (2) Injury may occur to sorghum following the use of Bicep Lite II Magnum under abnormally high soil moisture conditions during early development of the crop.*

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

Bicep Lite II Magnum may be applied in water by aircraft. Applications in fluid fertilizer should be only by ground equipment.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result.

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

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to nontarget areas.

To prevent off-site movement due to runoff or wind erosion:

1. Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
2. Do not apply to impervious substrates, such as paved or highly compacted surfaces.
3. Do not use tailwater from the first flood or furrow irrigation of treated fields to treat nontarget crops, unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.

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 Lite II Magnum or a tank mixture may reduce effectiveness. Cultivate if weeds develop in conventional tillage corn or sorghum.

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

Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution in a responsible manner. Do not use a sprayer or applicator contaminated with other materials, or crop damage or sprayer clogging of the application device may occur.

### Weed Resistance Management

ATRAZINE	GROUP	5	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

For resistance management, please note that Bicep II Magnum contains two herbicide active ingredients, a Group 5/ photosynthesis inhibitor and a Group 15/shoot inhibitor. Two modes of action and can be an effective component of a weed resistance management strategy. Any weed population may contain plants naturally resistant to Group 5 and/or Group 15 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

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.

## **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.

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

- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage ( or other mechanical control methods), cultural ( e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

### **Do not overuse the technology**

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

### **Scout and inspect fields following application**

- Prevent an influx of weeds into the field by controlling weeds in field borders.
- Scout fields after application to verify that the treatment was effective.
- Suspected- herbicide resistant weeds may be identified by these indicators
  - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
  - A spreading patch of non-controlled plants of a particular weed species; and
  - Surviving plants mixed with controlled individuals of the same species.



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

### Prevent weed escapes before, during, and after harvest

- Do not allow weed escapes to produce seed or vegetative structures such as tubers or stolons which contribute to spread and survival. Consider harvest weed seed management and control weeds post-harvest to prevent seed production.

### Resistant Weeds

Contact your local Syngenta representative, retailer, crop advisor or extension agent to determine if weeds resistant to the modes of action contained in this product are present in your area. Do not assume that each listed weed is being controlled by multiple modes of action. Premixes are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product. If resistant biotypes have been reported, use the full labeled rate of this product, apply at the labeled timing, and tank-mix with an additional different mode of action product so there are multiple effective modes of application for each suspected resistant weed.

### Mixing Instructions

Thoroughly recirculate containers and bulk tanks before using. Bicep Lite II Magnum is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. Bicep Lite 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 Lite II Magnum and used to control weeds in corn or Concep-treated sorghum.

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

- 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 Lite II Magnum onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken 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. Absorptive materials should be added 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 Lite II Magnum to be used by the following:

$$\frac{2000}{\text{lb of fertilizer per acre}} \times \frac{\text{qt of Bicep Lite II Magnum per acre}}{\text{Magnum per acre}} = \frac{\text{qt of Bicep Lite II Magnum}}{\text{per ton of fertilizer}}$$

### **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 Lite II Magnum with Exxon Aromatic 200 at a rate of 2.0-2.5 pt/gal of Bicep Lite 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. Drying agents should not be used when using Aromatic 200.

**Notes:** (1) Mixtures of Bicep Lite II Magnum and Aromatic 200 must be used 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 Lite 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 recommended. (3) Drying agents are not recommended for use with On-The-Go impregnation equipment.

*Precautions: To avoid potential for explosion, (1) Do not impregnate Bicep Lite II Magnum on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine Bicep Lite II Magnum with a single superphosphate (0-20-0) or treble superphosphate (0-46-0). (3) Do not use Bicep Lite 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. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil is recommended to obtain satisfactory weed control. 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 Lite II Magnum impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when Bicep Lite II Magnum is applied as a spray in water or fluid fertilizer. (2) To avoid potential crop injury, do not use the herbicide/fertilizer mixture on crops where planting beds are to be formed.*

### **Application in Water or Fluid Fertilizers**

**Bicep Lite 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 Lite 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 Lite II Magnum, then add Balance PRO, Banvel, Lorox or equivalent, or Princep; next add Dual Magnum, or Dual II Magnum; then add Gramoxone brands, Landmaster BW, Touchdown, or Roundup (glyphosate products), 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 Lite II Magnum + Liberty® Herbicide when applied postemergence to corn designated as tolerant to Liberty (glufosinate); and with Roundup Ultra™ when applied postemergence to corn designated as tolerant to Roundup (glyphosate). Provide sufficient agitation during mixing and application to maintain a uniform suspension.

### **Compatibility Test**

Conduct a jar test before tank mixing to ensure compatibility of Bicep Lite 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 two 1 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 1/4 tsp or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (1/4 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 1/2 the compatibility agent to the fertilizer or water and the other 1/2 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.

#### 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 and where weed pressure, particularly from grasses, is expected to be especially heavy.

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

<b>COARSE</b>	Sand, loamy sand, sandy loam
<b>MEDIUM</b>	Loam, silt loam, silt
<b>FINE</b>	Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay

#### Application Procedures

**Ground Application:** Use sprayers that provide accurate and uniform application. Screens in nozzles and in suction and in-line strainers should be 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:

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

**Low Carrier Application (Broadcast Ground Application Only):** Use sprayers, such as Ag-Chem RoGator®, Hagie, John Deere Hi-Cycle™, John Deere 4700 Sprayer, Melroe Spra-Coupe, Tyler Patriot™, or Willmar Air Ride®, that provide accurate and uniform application. **Only water may be used as a carrier.** Screens in suction and in-line strainers should be 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. Maximum sprayer speed is 15 mph. Maintain uniform travel speed while spraying. Rinse sprayer thoroughly with clean water immediately after each use.

**Note:** Low pressure nozzles reduce drift and increase application accuracy. When using automatic rate controlling devices, care should be taken to spray the material within the rated working pressure and flow ranges of the nozzle selected. Nozzle screens should be used when required by the manufacturer. All nozzles should be placed on 20-inch centers, except flooding types which should be placed on 40-inch centers. When Flat Fan-type nozzles are used, use 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 Lite II Magnum alone):** Use aerial application only where broadcast applications are specified. Apply a minimum of 1.0 gal of water for each 1.0 gal of this product applied per acre, but for rates below 1.0 gal/A, use in sufficient water to equal 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 label directions, make applications at a maximum height of 10 ft, 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. Flagmen and loaders should 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.

#### **Handheld Technology Applications**

- Take precautions to minimize 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.

## BICEP LITE II MAGNUM APPLIED ALONE

**Weeds Controlled** — When applied early preplant, preplant surface-applied, preplant incorporated, or preemergence, Bicep Lite II Magnum will control or suppress the following weeds:

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

\*Control of these weeds can be erratic, especially under dry weather conditions. Control escaped weeds with cultivation or application of an 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 for your given soil texture and rate recommendation based on your soil conservation practices.
2. **Thoroughly till moist soil** to destroy germinating and emerged weeds. If Bicep Lite II Magnum is to be applied preplant incorporated, this tillage may be used to incorporate Bicep Lite II Magnum if uniform 2-inch incorporation is achieved as directed under **Application Procedures**.
3. Plant crop into moist soil **immediately after tillage**. If Bicep Lite 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 1/2-1 inch of water. Use lower water volume (1/2 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, use a uniform, shallow cultivation as soon as weeds emerge for optimal control.
6. For large-seeded broadleaf species, or those which are listed as partially controlled, an application of a post-emergence herbicide should be made, if needed, following an application of Bicep Lite II Magnum.

### Application Timings\*

\*Where there are state/local requirements regarding atrazine use (including lower maximum rates and/or higher 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 Lite II Magnum contains 2.67 lb ai atrazine + relateds per gal (0.6675 lb ai/qt). If Bicep Lite II Magnum is used in tank mix or sequentially with any other atrazine-containing product, do not exceed the following atrazine limits per year.

#### 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 covering with plant residues at planting, apply a maximum of 2 lb of atrazine/A active ingredient as a broadcast spray.

If soil coverage with plant residue is less than 30% at planting, a maximum of 1.6 lb of atrazine/A active ingredient may be applied.

- **On Land Not Highly Erodible**

Apply a maximum of 2 lb of atrazine/A as a broadcast spray.

#### FOR POSTEMERGENCE APPLICATION TO FIELD CORN

If no atrazine was applied prior to field corn emergence, a maximum of 2 lb ai/A may be applied postemergence. If a postemergence treatment is required following an earlier herbicide application containing atrazine, the total atrazine applied may not exceed 2.5 lb ai per acre per calendar year.

#### Corn (All Types)

Applications by mechanically pressurized handguns are prohibited in sweet corn.

#### CORN RATE RESTRICTIONS:

- 1) Maximum Single Application Rate: 2.2 qt/A/application-(atrazine 1.47 lb ai/A + S-metolachlor 1.83 lb ai/A);
- 2) DO NOT exceed 2.5 lb ai/A/year of atrazine containing products;
- 3) DO NOT exceed 3.71 lb ai/A/year of S-metolachlor containing products.

**Early Preplant:** For coarse-textured soils, apply 1.5 qt of Bicep Lite II Magnum no earlier than 2 weeks before planting. For medium- and fine-textured soils, Bicep Lite II Magnum may be applied as a split treatment, by applying  $\frac{2}{3}$  the recommended rate 30-45 days before planting, followed by the remaining  $\frac{1}{3}$  rate at planting. See Table 1. Applications made less than 30 days before planting may be either split or single applications. For all soils, Bicep Lite II Magnum must be tank mixed with a contact herbicide (e.g., Gramoxone brands, Touchdown, or Roundup) if weeds are present at the time of treatment. If large-seeded dicots are present in the field, an application of an appropriate postemergence herbicide may be necessary after corn emergence. Observe the directions for use, precautions, and restrictions of all herbicides used in tank mixtures or as sequential to Bicep Lite II Magnum. If the postemergence product contains atrazine, do not exceed the maximum use rates for that soil or location.

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 Lite II Magnum at 1.1-1.4 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. Do not incorporate or disturb the soil before planting, and avoid moving the soil during the planting operation. A follow-up application 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.

**Notes:** (1) If a follow-up application of Dual Magnum or Dual II Magnum is needed, do not exceed a total of 1.6 lb ai of S-metolachlor per acre, including the preplant Bicep Lite II Magnum application on medium- or fine-textured soils. On fine-textured soils with more than 3% organic matter, do not exceed 1.9 lb ai of S-metolachlor.

(To determine the total lb ai of S-metolachlor per acre, use the following 2-step method:

A. Determine the lb ai of S-metolachlor applied as Bicep Lite II Magnum (1.0 qt = 0.835 lb ai of S-metolachlor); then, If Dual Magnum or Dual II Magnum is to be used, add the lb ai to be applied in these products to the lb in Step A above.)

(2) To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

**Table 1: Bicep Lite II Magnum – Early Preplant – Corn**

Soil Texture	Single Application	Split Application*	
		30-45 DBP**	At Planting
<b>COARSE</b> Sand, loamy sand, sandy loam	1.5 qt/A	DO NOT APPLY	
<b>MEDIUM</b> Loam, silt loam, silt	1.5 qt/A to 1.9 qt/A	1.0 qt/A to 1.25 qt/A	0.5 qt/A to 0.66 qt/A
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	1.9 qt/A to 2.2 qt/A	1.25 qt/A to 1.6 qt/A	0.66 qt/A to 0.8 qt/A

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

\*\*DBP — Days before planting

**Preplant Surface, Preplant Incorporated, or Preemergence:** Apply Bicep Lite 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.

**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 Lite 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
<b>COARSE</b> Sand, loamy sand, sandy loam	0.9 qt	1.1-1.5 qt
<b>MEDIUM</b> Loam, silt loam, silt	1.1-1.5 qt	1.5 qt
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	1.5 qt	1.5-2.2 qt*
Muck or peat soils (more than 20% organic matter)	DO NOT USE	

\*For yellow nutsedge control on fine-textured soils above 3% organic matter: Apply 2.2 qt of Bicep Lite II Magnum per acre.



## **BICEP LITE II MAGNUM FOUNDATION PROGRAMS FOR PLANNED TWO-PASS WEED CONTROL SYSTEMS IN ROUNDUP READY AND GLYPHOSATE TOLERANT CORN**

Bicep Lite II Magnum may be applied preplant incorporated or preemergence in Roundup Ready or glyphosate tolerant corn at rates down to 0.9 qt/A on all soils when followed by a planned postemergence application of an approved glyphosate based product – examples include Touchdown and Roundup UltraMax. Follow all other directions for use, precautions and restrictions listed for Bicep Lite II Magnum on this label. The glyphosate product must be registered for postemergence applications in Roundup Ready or glyphosate tolerant corn and be applied according to the weed and crop timings, methods, precautions and restrictions listed on the glyphosate containing product label. When used in this way, Bicep Lite II Magnum will provide reduced competition of the weeds listed as controlled under the preplant and preemergence sections of this label for a period of 30 or more days, thus improving the timing flexibility and effectiveness of the glyphosate based product application.

**Notes:** (1) In the event of escape of annual weeds following an early preplant, preplant surface, preplant incorporated, or preemergence treatment of Bicep Lite II Magnum applied alone or in combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., AAtrex®, Beacon®, Banvel, Brominal®, Buctril®, or 2,4-D. 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. (2) Brominal or Buctril may be applied postemergence alone or in tank mix combination with AAtrex. Do not exceed 1.2 lb ai/A of AAtrex in tank mix combination with Brominal or Buctril postemergence. Refer to the AAtrex, Brominal, and Buctril labels for specific rates and precautions. (3) If AAtrex or another product containing atrazine is used postemergence following application of Bicep Lite II Magnum, do not exceed a total of 2.5 lb ai/A of atrazine per year.

### **Postemergence Broadcast — Corn**

#### **Weeds Controlled**

common ragweed  
flixweed  
jimsonweed  
kochia  
lambsquarters  
morningglory  
mustards  
pigweed  
sunflower  
waterhemp

#### **Weeds Partially Controlled**

cocklebur  
giant foxtail  
green foxtail  
purslane  
prickly sida  
smartweed  
velvetleaf  
yellow foxtail  
yellow nutsedge

Apply Bicep Lite II Magnum early postemergence, using the appropriate rate from Table 3 before weeds pass the 2-leaf stage of development and before corn exceeds 5 inches in height. Application to larger weeds may result in unsatisfactory control. A tank mix or sequential application with a postemergence herbicide may be needed for adequate control of large-seeded broadleaf weeds as well as other broadleaves not listed above. Occasional corn leaf burn may result, but this should not affect later growth or yield.

**Note:** To avoid possible illegal residues, (1) do not graze or feed field corn forage from treated areas for 60 days or sweet corn forage 45 days following application and (2) do not harvest sweet corn ears from treated areas for 30 days following application.

**Table 3: Bicep Lite II Magnum - Postemergence Broadcast – Corn**

Soil Texture	Broadcast Rate Per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	1.1 qt
<b>MEDIUM</b> Loam, silt loam, silt	1.5 qt
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	1.5-1.9 qt*

\*For better control of yellow nutsedge and broadleaf weeds on fine-textured soils above 3% organic matter, apply 1.9 qt of Bicep Lite II Magnum.

**Notes:** (1) If another atrazine-containing product has been applied early preplant, preplant surface, preplant incorporated, or preemergence, do not exceed a total of 2.5 lb of atrazine per acre. (2) Do not exceed a total of 3.75 lb of the active ingredient in the Dual Magnum products or its component in the Bicep Magnum® products per acre of a corn crop, or illegal residues may result.

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

#### **Postemergence-Directed – Corn**

Bicep Lite II Magnum may be applied 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** sections of the corn label.

Apply Bicep Lite II Magnum to weed-free soil at the appropriate rate in Table 4, following use of an early preplant, preplant surface, preplant incorporated, or preemergence herbicide, or following a lay-by cultivation. If weeds have emerged, apply before grass and broadleaf weeds exceed the 2-leaf stage. Additional control of emerged broadleaf weeds can be obtained by tank mixing with an appropriate postemergence herbicide. Application to weeds larger than the 2-leaf stage can result in unsatisfactory control. Apply to corn not exceeding 12 inches in height. Minimize contact with corn leaves.

**Note:** To avoid possible illegal residues, (1) do not graze or feed field corn forage from treated areas for 60 days or sweet corn forage for 45 days following application and (2) do not harvest sweet corn ears from treated areas for 30 days following application.

**Table 4: Bicep Lite II Magnum - Postemergence-Directed – Corn**

Soil Texture	Broadcast Rate Per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	0.9 qt
<b>MEDIUM</b> Loam, silt loam, silt	1.5 qt
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	1.5-1.9 qt

**Note:** If Bicep Lite II Magnum, Dual II Magnum, or other products containing S-Metolachlor and/or atrazine have been applied, do not exceed a total of 2.5 lb/A of atrazine active ingredient or 3.75 lb/A of the active ingredient in Dual II Magnum.

### **Sorghum (Sorghum Seed Treated with Concep)**

Do not apply atrazine and propazine products to the same sorghum acre.

#### **SORGHUM RATE RESTRICTIONS:**

- 1) Maximum Single Application Rate: 1.9 qt/A/application-(atrazine 1.27 lb ai/A + S-metolachlor 1.58 lb ai/A);
- 2) DO NOT exceed 2.5 lb ai/A/year of atrazine containing products;
- 3) DO NOT exceed 1.68 lb ai/A/year of S-metolachlor containing products.

**Early Preplant (Sorghum Seed Treated with Concep):** For minimum-tillage and no-tillage systems only, Bicep Lite 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 from Table 5. Use only split applications for treatments made 30-45 days before planting with  $\frac{2}{3}$  the recommended 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.

If weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Gramoxone brands, Landmaster BW, or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. Under dry conditions, irrigation after application is recommended to move Bicep Lite II Magnum into the soil.

**Note:** To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished. Do not use on coarse soils. Do not use on medium soils with less than 1.0% organic matter.

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 Lite II Magnum at 1.1-1.4 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. Do not incorporate or disturb the soil before planting and avoid moving the soil during the planting operation. 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 sorghum and grass weeds emerge.

**Notes:** (1) Do not use on soils with a pH greater than 8.0 if grain sorghum is to be planted. (2) If a follow-up application of Dual Magnum or Dual II Magnum is needed, do not exceed a total of 1.4 lb ai of S-metolachlor per acre, including the early preplant Bicep Lite II Magnum application on medium-textured soils. On fine-textured soils, do not exceed 1.6 lb ai of S-metolachlor per acre.

(To determine the total lb ai of S-metolachlor per acre, use the following 2-step method:

- A. Determine the lb ai of S-metolachlor applied as Bicep Lite II Magnum (1.0 qt = 0.835 lb ai of S-metolachlor); then,
- B. If Dual Magnum or Dual II Magnum is used, add the lb ai to be applied in these products to the lb in Step A above.)

**Table 5: Bicep Lite II Magnum – Early Preplant – Grain or Forage Sorghum (Seed treated with Concep)**

Soil Texture	Organic Matter	Single Application	Split Application*	
			30-45 DBP**	At Planting
<b>COARSE</b> Sand, loamy sand, sandy loam	any level	DO NOT USE	DO NOT USE	
<b>MEDIUM</b> Loam, silt loam, silt	less than 1.0%	DO NOT USE	DO NOT USE	
	more than 1.0%	1.5 qt/A to 1.7 qt/A	1.0 qt/A to 1.1 qt/A	0.5 qt/A to 0.6 qt/A
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	less than 1.5%	1.5 qt/A to 1.7 qt/A	1.0 qt/A to 1.1 qt/A	0.5 qt/A to 0.6 qt/A
	more than 1.5%	1.7 qt/A to 1.9 qt/A	1.1 qt/A to 1.25 qt/A	0.6 qt/A to 0.66 qt/A

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

\*\*DBP – Days before planting

**Preplant Surface, Preplant Incorporated, or Preemergence (Sorghum Seed Treated with Concep):** Apply Bicep Lite II Magnum preplant surface, preplant incorporated, or preemergence, using the appropriate rates from Table 6.

**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.

**Table 6: Preplant Surface, Preplant Incorporated, or Preemergence – Grain or Forage Sorghum\* (Seed treated with Concep)**

Soil Texture	Organic Matter	Broadcast Rate Per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	any level	DO NOT USE
<b>MEDIUM and FINE</b> 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%	1.1-1.5 qt

\*Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas. Do not apply preplant incorporated in AZ or the Imperial Valley of CA.

*Precautions: To avoid possible crop injury, (1) Do not apply Bicep Lite II Magnum on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed. (2) Do not apply Bicep Lite II Magnum when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow. (3) Do not apply to sorghum grown under dry mulch tillage. (4) Injury may occur if both Bicep Lite II Magnum applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used. (5) In addition, sorghum growing under stress caused by minor element deficiency may be injured by Bicep Lite II Magnum. (6) Do not harvest sorghum forage within 60 days after the last application.*

#### Rotational Crops

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

Do not rotate to food or feed crops other than those listed below:

(1) 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. Do not make a second broadcast application. If the original application was banded and the second crop is planted in the untreated row middles, a second banded treatment may be applied. (2) Corn, sorghum, soybeans, cotton, or peanuts may be planted the spring following treatment. Do not graze or feed forage or fodder from cotton to livestock, or illegal residues may result. (3) Injury may occur to soybeans planted the year following application on soils having a calcareous surface layer. (4) 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, or soybean injury may occur. (5) If applied after June 10, do not rotate with crops other than corn or sorghum the next year, or crop injury may occur. (6) 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. (7) Do not plant sugar beets, tobacco, vegetables (including dry beans), spring-seeded small grains, or small-seeded legumes the year following application, or injury may occur.

## BICEP LITE II MAGNUM COMBINATIONS – CORN

Always follow label instructions for tank mix products when mixing with Bicep Lite II Magnum.

### Tank Mixture with Dual Magnum, Dual II Magnum, Princep – Conventional Tillage

**Dual Magnum Products:** Add up to 0.33 pt of Dual Magnum or Dual II Magnum per acre to the rate of Bicep Lite II Magnum recommended in Table 1 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 Princep Caliber 90) per acre to the rate of Bicep Lite II Magnum specified in Table 1 in the northeastern U.S. where heavy infestations of crabgrass or fall panicum are expected.

### Tank Mixture of Bicep Lite II Magnum with Dual Magnum, Dual II Magnum, Princep, Gramoxone Brands, Landmaster BW, Touchdown, or Roundup for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Gramoxone brands, Landmaster BW, Touchdown, or Roundup should be tank mixed with Bicep Lite II Magnum alone or with Bicep Lite II Magnum + 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. Landmaster BW, Touchdown, and Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The Bicep Lite II Magnum portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Bicep Lite II Magnum Alone** section for corn. The addition of Dual Magnum, Dual II Magnum, or Princep offers the advantage indicated for each under **Conventional Tillage**.

**Application:** Apply before, during, or after planting, but before corn emerges, at the appropriate rate in Table 7. Add 0.33 pt of Dual Magnum or Dual II Magnum, or 1.0 qt of Princep 4L (1.1 lb of Princep Caliber 90) per acre to the rate of Bicep Lite II Magnum specified in Table 7. Add Gramoxone brands, Landmaster BW, Touchdown, or Roundup at labeled rates.

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

### Tank Mixture of Bicep Lite II Magnum with 2,4-D or 2,4-D + Banvel for Minimum-Tillage or No-Tillage Systems

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 Lite II Magnum may be applied in combination with 2,4-D or 2,4-D + Banvel.

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 recommended instead of water. Add X-77® surfactant at 1.0-2.0 qt/100 gal of diluted spray, or another surfactant cleared for use on growing crops at its recommended 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., brome grass, orchardgrass, rye, or timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add Gramoxone brands at the labeled rate 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, and limitations on the respective product labels when applying these products in tank mix combination.

**Table 7: Bicep Lite II Magnum for Minimum-Tillage or No-Tillage Corn**

Soil Texture	Broadcast Rate Per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	1.1 qt
<b>MEDIUM</b> Loam, silt loam, silt	1.5 qt
<b>FINE</b> Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	1.5-2.2 qt*
Muck or peat soils	DO NOT USE

\*For yellow nutsedge control on fine-textured soils above 3% organic matter, apply 2.2 qt of Bicep Lite II Magnum per acre.

**Tank Mixture with Linuron for Control of Lambsquarters and Pigweed**

For prolonged control of lambsquarters and pigweed in DE, MD, NJ, NY, PA, VA, and WV, Bicep Lite II Magnum may be applied preemergence in combination with linuron. Apply Bicep Lite II Magnum according to the rates in Table 1 and linuron according to the following rates.

Soil Texture	Broadcast Rate Per Acre
Sandy loam (1-3% organic matter)	0.67 lb Lorox*
Sandy loam (3-6% organic matter)	1.0 lb Lorox*
Medium- and fine-textured soils (1-6% organic matter)	1.0 lb Lorox*

\*When using Lorox L or Lorox DF, use equivalent rates. One pt of Lorox L equals 1.0 lb of Lorox DF.

Follow instructions and precautions on the Bicep Lite II Magnum and Lorox labels when tank mixing these products.

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

**BICEP LITE II MAGNUM COMBINATIONS – FIELD CORN ONLY**

**Balance PRO:** Bicep Lite II Magnum and Balance PRO have a complementary crop response and weed control profile, which allows various tank mix rate combinations to be considered. The addition of Balance PRO will improve the control of certain problem weeds, including Texas panicum, woolly cupgrass, and wild proso millet. Bicep Lite II Magnum improves both the duration and spectrum of annual grass and small seeded broadleaf weed control, in particular foxtails (yellow foxtail), witchgrass, and yellow nutsedge.

To reduce the risk of an adverse crop response, the Balance PRO label does not allow applications to coarse textured soils with less than 1.5% organic matter and warns about applications to all soils with less than 1.5% organic matter or with pH greater than 7.5 – as well as applications made to areas in fields with clay knolls, eroded hill sides, and exposed subsoil. Bicep Lite II Magnum has no adverse crop response warnings or use restrictions.

Listed below are compensating rate options for combinations of Bicep Lite II Magnum and Balance PRO, i.e. higher rates of Bicep Lite II Magnum are combined with lower rates of Balance PRO, and vice versa. Select a rate option for Bicep Lite II Magnum plus Balance PRO by weighing the intensity of problem weed pressure (population presence and density) and your acceptance for risk of an adverse crop response. For example, where Texas panicum, woolly cupgrass, or wild proso millet are a primary target weed, use a tank mix combination with a higher Balance PRO rate for the given soil type. Where your tolerance of an adverse crop response risk is high and/or a more general weed spectrum is targeted (especially yellow foxtail, witchgrass or yellow nutsedge), use a tank mix combination with a higher Bicep Lite II Magnum rate for the given soil type. Where a target weed is listed as controlled on both product labels, a tank mix combination option including intermediate rates of both products may be used. Where a target weed is listed as controlled on only one product label, do not apply a rate of that product below what is listed for that weed on the individual product label, or unacceptable control may result. Follow all other directions for use, rate limitations, precautions and restrictions on both the Bicep Lite II Magnum and Balance PRO product labels.

Bicep Lite II Magnum plus Balance PRO tank mix rate options when applied preplant (incorporated or surface applied) up to 7 day before planting or preemergence in field corn:

**For coarse-textured soils**, where 1.5 or 1.88 oz/A of Balance PRO is used, 0.9 qt/A of Bicep Lite II Magnum may be applied. Bicep Lite II Magnum at rates up to 1.5 qt/A can be used in combinations with Balance PRO on coarse textured soils if the soil organic matter content is 3% or greater. Do not use Balance PRO on coarse textured soils with less than 1.5% organic matter.

**For medium-textured soils**, where 1.5 oz/A of Balance PRO is used, rates as low as 1.1 qt/A of Bicep Lite II Magnum may be applied. Where 1.88 or 2.25 oz/A of Balance PRO is used, rates as low as 0.9 qt/A of Bicep Lite II Magnum may be applied. Bicep Lite II Magnum at rates up to 1.5 qt/A can be used in combinations with Balance PRO on medium textured soils.

**For fine-textured soils**, where 1.5 oz/A of Balance PRO is used, rates as low as 1.1 qt/A of Bicep Lite II Magnum may be applied if the soil organic matter is less than 3% -- if the soil organic matter content is 3% or greater, 1.5 qt/A of Bicep Lite II Magnum should be applied. Where 1.88 or 2.25 oz/A of Balance PRO is used, rates as low as 1.1 qt/A of Bicep Lite II Magnum may be applied. Where 3.0 oz/A or more of Balance PRO are used, rates as low as 0.9 qt/A of Bicep Lite II Magnum may be applied. Bicep Lite II Magnum at rates up to 2.2 qt/A can be used in combinations with Balance PRO on fine textured soils if the soil organic matter content is 3% or greater.

**Note:** Check the compatibility of Bicep Lite II Magnum tank mixtures with Balance PRO before mixing in spray tank by using the procedure described under **Application in Water or Fluid Fertilizers**.

## TANK MIXTURES FOR POSTEMERGENCE SALVAGE WEED CONTROL IN FIELD CORN ONLY

For postemergence control of weeds in specific types of field corn, combined with residual preemergence control, the following combinations of Bicep Lite 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.

**Notes:** (1) Follow all label directions, instructions, precautions, and limitations for each product used. (2) Do not use liquid fertilizer with these mixtures or corn injury may occur. (3) For each tank mixture, apply only to the specific field corn type specified on that product label. (4) In-row weed control may be reduced because of lack of coverage when applied to corn over 4 inches tall.



A. **Bicep Lite II Magnum + Liberty Herbicide: Postemergence use in LibertyLink® Corn or Corn Warranted by Bayer CropScience as being tolerant to Liberty Herbicide**

The tank mixture of Bicep Lite II Magnum + Liberty 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 provides postemergence control of a broad spectrum of grass and broadleaf weeds and the Bicep Lite II Magnum provides residual control of grasses and broadleaf weeds listed in the label section **Bicep Lite II Magnum Applied Alone – Corn – Weeds Controlled**. For the proper rate of Bicep Lite II Magnum applied postemergence with Liberty, refer to Table 2 and use the minimum rate per soil texture for season-long control. Refer to the Liberty label for the Liberty 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 rate recommended to control the species and growth stages present.

Follow all applicable use directions, limitations, precautions, and information regarding application to corn on the Bicep Lite II Magnum and Liberty Herbicide labels.

B. **Bicep Lite II Magnum + Touchdown or Roundup Ultra for Postemergence Application to Corn with the Roundup Ready® Gene**

The tank mixture of Bicep Lite II Magnum + Touchdown or Roundup Ultra can be applied postemergence to weeds and to corn designated as containing the Roundup Ready Gene. Application may be applied postemergence to Roundup Ready corn up to 12 inches in height. This mixture will provide postemergence control of weed species on the Roundup Ultra label, and also residual control of weed species on the Bicep Lite II Magnum label. Use the minimum Bicep Lite II Magnum rate postemergence with Roundup Ultra in Roundup Ready corn as specified in **Table 2** of this label according to soil texture. Refer to the **Supplemental Labeling of Touchdown or Roundup Ultra for Postemergence Application to Corn with the Roundup Ready Gene** and to each product label and follow all appropriate use directions, application procedures, precautions, and limitations. Apply 24-32 fl oz/A of Roundup Ultra for control of labeled broadleaf and grass weeds. Refer to the Roundup Ultra label for directions to control problem species.

Follow all applicable use directions, limitations, precautions, and information regarding application to corn on the Bicep Lite II Magnum and Touchdown or Roundup Ultra labels, and on the **Supplemental Labeling of Roundup Ultra for Postemergence Application to Corn with the Roundup Ready Gene**. Where difficult species and/or severe weed populations are expected, use the maximum rate where rate ranges are listed.

C. **Bicep Lite II Magnum + Exceed®**: Apply 0.90-1.25 qt/A of Bicep Lite II Magnum + 1.0 oz/A of Exceed to corn that is 4-12 inches tall. The application may be broadcast, semi-directed, or directed. The Bicep Lite II Magnum rate is based on soil texture, with 0.90 qt/A on coarse and 1.25 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 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®.

D. **Bicep Lite II Magnum + Exceed + Accent**: Apply the same rates of Bicep Lite II Magnum and Exceed as mentioned above. Add Accent at 0.33 oz/A for more effective control of certain annual grasses. Apply to field corn between 4 and 12 inches. Add a nonionic surfactant at 0.25% v/v.

E. **Bicep Lite II Magnum + Spirit®**: Spirit herbicide at 1.0 oz/A can be substituted in place of Exceed in the above combinations in field corn only.

**Notes:** Do not use fertilizer or crop oil concentrate with these mixtures or injury to field corn may occur. The combination of Bicep Lite II Magnum with other products for postemergence weed control in corn is generally not recommended. **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. [It should be noted that 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 (Tank Mixtures C, D, and E) to the tank mix in the following order:

1. Products in water-soluble bags should be added first.
2. Bicep Lite II Magnum
3. Additives

*Precautions: (1) Follow all label instructions, precautions, and rotational restrictions for individual products when making these applications to field corn. When Bicep Lite 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. (3) Do not apply Bicep Lite II Magnum to corn that exceeds 12 inches in height or harvest forage within 60 days after the last application.*

### **BICEP LITE II MAGNUM COMBINATIONS – GRAIN SORGHUM (SEED TREATED WITH CONCEP)**

#### **Tank Mixture of Bicep Lite II Magnum with Gramoxone Brands, Landmaster BW, Touchdown, or Roundup 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, Landmaster BW, Touchdown, or Roundup may be tank mixed with Bicep Lite II Magnum. When used as directed, the Gramoxone brands portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW, Touchdown, or Roundup combinations will control emerged annual and perennial weeds when applied as directed on its label. The Bicep Lite II Magnum portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Bicep Lite 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 8. Add Gramoxone brands, Landmaster BW, Touchdown, or Roundup at labeled rates. Apply in a minimum of 20 gal of water per acre with conventional spray equipment.

**Table 8: Bicep Lite II Magnum for Minimum-Tillage or No-Tillage Grain Sorghum\* (Seed treated with Concep)**

Soil Texture	Organic Matter	Broadcast Rate Per Acre
<b>COARSE</b> Sand, loamy sand, sandy loam	any level	DO NOT USE
<b>MEDIUM and FINE</b> 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%	1.1 qt
	more than 1.5%	1.33-1.5 qt

\*Do not use in NM or TX, except in the TX Panhandle, Gulf Coast, and Blacklands areas. Do not apply preplant incorporated in AZ or the Imperial Valley of CA.

**Precautions:** *To avoid possible crop injury, (1) Do not apply Bicep Lite II Magnum on highly alkaline soils (pH greater than 8.0) or on eroded areas where calcareous subsoils are exposed. (2) Do not apply Bicep Lite II Magnum when sorghum is planted in deep furrows because heavy rains following application can cause excessive concentrations of herbicide in the furrow. (3) Do not apply to sorghum grown under dry mulch tillage. (4) Injury may occur if both Bicep Lite II Magnum applied early preplant, preplant surface, preplant incorporated, or preemergence and an at-planting systemic insecticide applied in-furrow are used. (5) In addition, sorghum growing under stress caused by minor element deficiency may be injured by Bicep Lite II Magnum. (6) Do not graze or harvest sorghum forage within 60 days after the last application.*

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

## STORAGE AND DISPOSAL

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

### **Pesticide Storage**

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

### **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 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.

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Greensboro, North Carolina 27419-8300

**SCP 827A-L3N 1121**

**4150606**

# 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.

 **BicepLite II Magnum**  
Herbicide

For weed control in corn and grain or forage sorghum

Active Ingredients:	
Atrazine (CAS No. 1912-24-9) . . . . .	28.1%
Atrazine related compounds . . . . .	0.6%
S-metolachlor (CAS No. 87392-12-9) . . . . .	35.8%
Other Ingredients:	35.5%
Total:	100.0%

Bicep Lite II Magnum contains 2.67 lb atrazine + related per gallon and 3.33 lb of S-metolachlor active ingredient per gallon.

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

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

See additional precautionary statements and directions for use inside booklet.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-827  
EPA Est. 100-LA-001<sup>GBL</sup> EPA Est. 11773-IA-01<sup>WVC</sup>  
(Superscript is the first three letters of batch code on container)

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

SCP 827A-L3N 1121 4150606

**2.5 gallons**  
Net Contents

### Precautionary Statements

Hazards to Humans and Domestic Animals

#### CAUTION

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

**FIRST AID** If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If

swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person. If inhaled: 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. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOTLINE NUMBER:** For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372.

**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 washwater 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 Lite 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 if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisory:** This product may impact surface water quality due to runoff of rain water or 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

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

**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:** 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 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.

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.



