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Systems Integration Group, Inc.

Please read instructions on rev	verse before completing for	m. 100 - 82	.7	8/14/98	P11-16
PM 23 <b>≎EPA</b>	United State Environmental Protec Washington, DC	s tion Agency	X Am	gistration nendment her	OPP Identifier Number Notification
	Applica	tion for Pesticid	e - Section I		
Company/Product Number     100-827		2. EPA Miller	Product Manager	3. Pr	oposed Classification
Company/Product (Name) Bicep Lite II MAGNUM Herbicide		PM# 23			None X Restricted
5. Name and Address of Applia Novartis Crop Protection P. O. Box 18300 Greensboro, NC 2741	on, Inc.	my produc	ot is similar or ident	n accordance with Fl tical in composition a	FRA Section 3(c)(3) (b)(i), and labeling to:
Check if this i	is a new address	Product N	ame		
		Section - II			
Amendment - Explain b	elow. se to Agency letter dated		Final printe Agency lett "Me Too" A		
X Notification - Explain be		***		plain below.	UG 1 4 1998
following statement prior to the York This notification is consistent with the labeling or the confidential statement to EPA. I further under the in violation of FIFRA and I ma	n the provisions of PR Notice atement of formula of this provistand that if this notification is	95-2 and EPA regulati duct. I understand that s not consistant with t	ons at 40 CFR 152 It it is a violation of he terms of PR No	2.46, and no other ch 18 U.S.C. Sec. 100 dice 95-2 and 40 CFI	nanges have been made to 1 to willfully make any false
1. Material This Product Will	Be Packaged In:	Section - III		·	<del></del>
Child-Resistant Packaging Yes* No *Certification must	Unit Packaging Yes No If "Yes" No. p	Yes No	ole Packaging  No. per	- F	Metal Plastic Slass Paper
be submitted	Unit Packaging wgt. Conti	ainer   Unit Packagin	g wgt. container	ا اسار	Other (Specify)
Location of Net Contents In:  Label Cor	formation 4. S	ize(s) Retail Containe	r	5. Location of Lal On Labe On Labe	l.
6, Manner in Which Label is A	ffixed to Product	Lithograph Paper glued Stenciled	Othe	er	
		Section - IV			
	ems directly below for identific		e contacted, if nec		
Name Karen S. Stumpf	. <u> </u>		latory Manage		ne No. (Include Area Code) 632 - 2169 (
l acknowledge that any kno- both under applicable law.	Cert I have made on this form and wingly false or misleading sta	tement may be punish			6. ExterApplication Received (Stamped)
2. Signature/	Stump	3. Title Senior Regulato	ry Manager		
4. Typed Name	0	5. Date 7/28/98			• • • •

Karen S. Stumpf
EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

Table 3: Postemergence Broadcast - Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.1 qts.
MEDIUM Loam, silt loam, silt	1.5 qts.
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	1,5-1.9 qts.*

<sup>\*</sup>For better control of yellow nutsedge and broadleaf weeds on fine-textured soils above 3% organic matter, apply 1.9 qts. 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 lbs. of atrazine per acre. (2) Do not exceed a total of 3.75 lbs. 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. If Bicep®, Bicep II®, Dual, or Dual II is used, multiply lbs. a.i. of metolachlor by 0.625 and add to the MAGNUM products, not exceeding 3.75 lbs.

Rotational Crops: Follow the crop rotation recommendation 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, do not graze or feed forage from treated areas for 30 days following application.

Table 4: Postemergence-Directed - Corn

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

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

## Sorghum (Sorghum-Seed Treated with Concep or Screen)

Early Preplant (Sorghum-Seed Treated with Concep or Screen): 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 2/3 the recommended rate applied initially and the remaining 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 Extra, 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 qts./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, Dual II, 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, Dual II, Dual MAGNUM, or Dual II MAGNUM is needed, do not exceed a total of '. '. . . 1.4 lbs. a.i. 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 lbs. a.i. of S-Metolachlor per acre.

[To determine the total lbs. a.i. of S-Metolachlor per acre, use the following 2-step method:

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

OR

If Dual or Dual II is to be used, multiply the lbs. a.i. of metolachlor to be applied by 0.625 and add to the lbs. a.i. of S-Metolachlor from Step A.]

Table 5: Bicep Lite II MAGNUM - Early Preplant - Grain or Forage Sorghum (Seed treated with Concep or Screen)

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

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

Preplant Surface, Preplant Incorporated, or Preemergence (Sorghum-Seed Treated with Concep or Screen): 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 or Screen)

Soil Texture	Organic Matter	Broadcast Rate Per Acre		
COARSE Sand, loamy sand, sandy loam	any level	DO NOT USE		
MEDIUM and FINE Loam, silt loam, silt, sandy clay loam,	less than 1.0%	DO NOT USE		
silty clay loam, clay loam, sandy clay, silty clay, clay	more than 1.0%	1.1-1.5 qts.		

<sup>\*</sup>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.

<sup>\*\*</sup>DBP - Days before planting

#### **Rotational Crops**

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 or Screen. 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 lbs. a.i. 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, Dual II, Dual MAGNUM, Dual II MAGNUM, Princep, Bladex, or Extrazine II - Conventional Tillage

**Dual Products:** Add up to 1/2 pt. of Dual or Dual II or 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 Catiber 90):** Add up to 1.0 qt. of Princep 4L (1.1 lbs. of Caliber 90) per acre to the rate of Bicep Lite II MAGNUM recommended in Table 1 in the northeastern U.S. where heavy infestations of crabgrass or fall panicum are expected.

Bladex (4L or 90DF): Add up to 2.0 qts. of Bladex 4L (2.2 lbs. of 90DF) per acre. When Bladex is added, the rate of Bicep Lite II MAGNUM suggested in Table 1 should be reduced by not more than 25% for a given soil texture in the Clarion-Nicollet-Webster soil association in northern IA and southern MN, or in other areas where soybean rotational concerns exist. Note: Crop injury may occur if this combination is applied post-emergence to corn.

Extrazine II: Add 1.0-2.0 qts. of Extrazine II 4L (1.1-2.2 lbs. of Extrazine II DF) per acre to the rate of Bicep Lite II MAGNUM in Table 2. For purposes of calculating the total atrazine rate, Extrazine II 4L contains 0.25 lb. of atrazine per quart. Do not exceed a total of 2.5 lbs. of atrazine active ingredient per acre per calendar year. Note: Crop injury may occur if this combination is applied postemergence to corn.

Note: Check the compatibility of Bicep Lite II MAGNUM tank mixtures with Bladex or Extrazine II before mixing in spray tank by using the procedure described under Application in Water or Fluid Fertilizers. Always use Unite (or an equivalent compatibility agent) at 2.0 pts./100 gals. when using Bladex 90DF in tank mixtures with Bicep Lite II MAGNUM. Compatibility testing is especially critical when using Bladex 90DF combinations. Always add Bladex or Extrazine II to the spray tank before Bicep Lite II MAGNUM, regardless of which Bladex or Extrazine II formulation is used.

Tank Mixture of Bicep Lite II MAGNUM Alone or Bicep Lite II MAGNUM + Bladex, Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, Extrazine II, or Princep, with Gramoxone Extra, Landmaster BW, 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 Extra, Landmaster BW, or Roundup should be tank mixed with Bicep Lite II MAGNUM alone or with Bicep Lite II MAGNUM + Bladex, Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, Extrazine II, or Princep. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW 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 Bladex, Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, Extrazine II, 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. Two qts. of Bladex 4L (2.2 lbs. of 90DF), or 1/2 pt. of Dual or Dual II, or 0.33 pt. of Dual MAGNUM or Dual II MAGNUM, or 1.0-2.0 qts. of Extrazine II 4L (1.1-2.2 lbs. of Extrazine II DF), or 1.0 qt. of Princep 4L (1.1 lbs. of Caliber 90) per acre may be added to the rate of Bicep Lite II MAGNUM recommended in Table 7. Add Gramoxone Extra, Landmaster BW, or Roundup at labeled rates.

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

Tank Mixture of Bicep Lite II MAGNUM Alone or Bicep Lite II MAGNUM + Bladex, or Extrazine II, 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 Bladex or Extrazine II. When used as directed, 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 Bladex or Extrazine II offers the advantage indicated for each under Conventional Tillage.

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# Bicep Lite II MAGNUM®

Application: Apply Bicep Lite II MAGNUM with Bladex or Extrazine II before, during, or after planting, but before corn emerges, at the appropriate rate of Bicep Lite II MAGNUM in Table 7 for the burndown of small existing annual weeds. Up to 2.0 qts. of Bladex 4L (2.2 lbs. of 90DF), or 1.0-2.0 qts. of Extrazine II 4L (1.1-2.2 lbs. of Extrazine II DF) per acre may be added to the rate of Bicep Lite II MAGNUM recommended in Table 7.

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 gals. 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 qts./100 gals. 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., bromegrass, orchardgrass, rye, or timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add Gramoxone Extra at the rate of 2.5 pts./A in place of or in addition to 2,4-D, as indicated above. Do not apply Gramoxone Extra 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.

Note: When applying Bicep Lite II MAGNUM and Bladex or Extrazine II in tank mix combination, follow directions under Conventional Tillage to ensure compatibility of these products in the tank mixture. Do not exceed a total of 2.5 lbs. of atrazine active ingredient per acre per calendar year.

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

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

<sup>\*</sup>For yellow nutsedge control on fine-textured soils above 3% organic matter, apply 2.2 qts. 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**

of this label under Bicep Lite II MAGNUM Applied Alone for further information.

Tank Mixture with Broadstrike\*+Dual® for Preemergence Weed Control in Field Corn Only Reduced rates of Broadstrike+Dual herbicide and Bicep Lite II MAGNUM herbicide may be tank mixed for control of several annual grasses and broadleaf weeds in field corn. In addition to the weeds listed as controlled on the Bicep Lite II MAGNUM label, this mixture will control velvetleaf and triazine-resistant populations of lambsquarters, pigweed, and velvetleaf. Weeds partially controlled by this tank mix include those under the Weeds Partially Controlled section under Bicep Lite II MAGNUM Applied Alone plus common ragweed and morningglory. Control of a few weeds can be erratic. Refer to the Weeds Controlled section

The Broadstrike+Dual and Bicep Lite II MAGNUM tank mix may be applied preplant incorporated, preemergence, or applied postemergence through the "spike" stage of corn growth, but before weed emergence. When applied postemergence to the crop, apply only with water before corn is 2 inches tall and first true leaf is unfurled. Target weeds which have emerged at the time of application may not be controlled.

# **Mixing Instructions**

Fill the spray tank 1/4-1/2 full with water or liquid fertilizer and start agitation. Add the required amount of Bicep Lite II MAGNUM and allow to become fully dispersed, then add the required amount of Broadstrike , +Dual, then add the rest of the water or liquid fertilizer. For tank mixtures with liquid fertilizer, always check compatibility as described on the labels for Bicep Lite II MAGNUM and Broadstrike+Dual.

#### Precautions and Restrictions:

- . Do not apply more than 2 weeks before planting.
- . Do not apply to field corn grown for seed.
- Do not use when Counter® or Thimet® insecticides are to be applied due to the risk of severe crop injury.
- Plant corn at least 1½ inches deep.
- Refer to the product labels for Broadstrike+Dual and Bicep Lite II MAGNUM for specific use restrictions, use precautions, and rotational crop intervals. The most restrictive provisions on either label shall apply.

Table 8: Broadcast Application Rates Per Acre for Preemergence Weed Control in Field Corn

	Less Than 3% Organic Matter*		Greater Than 3% Organic Matter			
Soil Texture	Broadstrike + Dual (pts.)	+	Bicep Lite II MAGNUM (pts.)	Broadstrike + Dual (pts.)	+	Bicep Lite II MAGNUM (pts.)
COARSE	1.5	+	0.90	1.5	+	0.90
MEDIUM	1.5-1.75**	+	1.25	1.75	+	1.25
FINE	1.75	+	1.25	2.0	+	1.25-1.60**

<sup>\*</sup>Application on soils with <1.5% organic matter may result in unacceptable crop injury.

Follow directions in the Bicep Lite II MAGNUM Applied Alone section of this label for improved control of certain weeds.

Add 1.0-2.0 pts./A of AAtrex 4L or equivalent rates of AAtrex Nine-O for an improved spectrum of broadleaf control and for more effective burndown in no-till or minimum-till situations. Follow atrazine rate restrictions on the AAtrex label.

Note: Triazine "resistant" weeds (triazine tolerant biotypes) are controlled by the tank mixture of Broadstrike +Dual and Bicep Lite II MAGNUM.

# TANK MIXTURE WITH EXCEED® OR SPIRIT™ AND ACCENT® FOR SALVAGE WEED CONTROL IN FIELD CORN ONLY

Bicep Lite II MAGNUM + Exceed: Apply 0.90-1.25 qts./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 qts./A on coarse and 1.25 qts./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.

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.

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 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.

<sup>\*\*</sup>Use the higher rate in fields with heavy weed pressure.

# BICEP LITE II MAGNUM COMBINATIONS - GRAIN SORGHUM (SEED TREATED WITH CONCEP OR SCREEN)

Tank Mixture of Bicep Lite II MAGNUM with Gramoxone Extra, Landmaster BW, 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 Extra, Landmaster BW, or Roundup may be tank mixed with Bicep Lite II MAGNUM. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW 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 9. Add Gramoxone Extra, Landmaster BW, or Roundup at labeled rates.

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

Table 9: Bicep Lite II MAGNUM for Minimum-Tillage or No-Tillage Grain Sorghum\* (Seed treated with Concep or Screen)

Soil Texture	Organic Matter	Broadcast Rate Per Acre  DO NOT USE	
COARSE Sand, loamy sand, sandy loam	any levet		
MEDIUM and FINE	less than 1.0%	DO NOT USE	
Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay,	1.0-1.5%	1.1 qts.	
silty clay, clay	more than 1.5%	1.33-1.5 qts.	

<sup>\*</sup>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.

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

# STORAGE AND DISPOSAL

## Storage

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

## Pesticide Disposal

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. 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 Disposal

Refer to label on container for disposal instructions.

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.

# **PRECAUTIONARY STATEMENTS**

# Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. This product may cause skin sensitization reactions in some people.

#### Statement of Practical Treatment

If in eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If inhaled: Move to fresh air.

If on skin: Wash with plenty of soap and water. Get medical attention.

Note to Physician: If ingested, induce emesis or lavage stomach. Administration of an aqueous slurry of activated charcoal can be considered. Treat symptomatically.

#### Personal Protective Equipment

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- · Shoes plus socks

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

#### **Engineering Control Statements**

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)(4-6)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

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

# **User Safety Recommendations**

# Users should:

- . Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing.
   As soon as possible, wash thoroughly and change into clean clothing.

#### **Environmental Hazards**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters 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.

#### **Ground Water 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 ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) 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 ground water.

S-Metolachlor has the potential to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

# **Surface Water Advisory**

S-Metolachlor has the potential to contaminate surface water through ground spray drift. Under some conditions, S-Metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

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

States may have in effect additional requirements regarding well-head setbacks and operational area containment.

This product may 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-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options may be used:

- 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 tile-outletted terraced field.
- 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.

AAtrex®, Beacon®, Bicep®, Bicep II®, Bicep Lite II MAGNUM®, Caliber 90®, Concep®, Dual®, Dual II®, Dual MAGNUM™, Dual II MAGNUM™, Exceed®, Nine-O®, Princep®, and Spirit™ trademarks of Novartis U.S. Patent Nos. 4,478,635; 4,618,361; 4,671,819; 5,002,606

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Unite® trademark of HACO, Inc.

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X-77® trademark of Loveland Industries, Inc.

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NCP 827A-L1C 0798



[To determine the total lbs. a.i. of S-Metolachlor per acre, use the following 2-step method:

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

#### OR

If Dual or Dual II is to be used, multiply the lbs. a.i. of metolachlor to be applied by 0.625 and add to the lbs. a.i. of S-Metolachlor from Step A.]

Table 5: Bicep Lite II MAGNUM - Early Preplant - Grain or Forage Sorghum (Seed treated with Concep or Screen)

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

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

Preplant Surface, Preplant Incorporated, or Preemergence (Sorghum-Seed Treated with Concep or Screen): 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 or Screen)

Soil Texture	Organic Matter	Broadcast Rate Per Acre	
COARSE Sand, loamy sand, sandy loam	any level	DO NOT USE	
MEDIUM and FINE Loam, silt loam, silt, sandy clay loam,	less than 1.0%	DO NOT USE	
silty clay loam, clay loam, sandy clay, silty clay, clay	more than 1.0%	1.1-1.5 qts.	

<sup>\*</sup>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.

.

<sup>\*\*</sup>DBP - Days before planting

#### **Rotational Crops**

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 or Screen. 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 lbs. a.i. 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, Dual II, Dual MAGNUM, Dual II MAGNUM, Princep, Bladex, or Extrazine II – Conventional Tillage

**Dual Products:** Add up to <sup>1</sup>/<sub>2</sub> pt. of **Dual** or **Dual** II or 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 lbs. of Caliber 90) per acre to the rate of Bicep Lite II MAGNUM recommended in Table 1 in the northeastern U.S. where heavy infestations of crab-grass or fall panicum are expected.

Bladex (4L or 90DF): Add up to 2.0 qts. of Bladex 4L (2.2 lbs. of 90DF) per acre. When Bladex is added, the rate of Bicep Lite II MAGNUM suggested in Table 1 should be reduced by not more than 25% for a given soil texture in the Clarion-Nicollet-Webster soil association in northern IA and southern MN, or in other areas where soybean rotational concerns exist. Note: Crop injury may occur if this combination is applied post-emergence to corn.

Extrazine II: Add 1.0-2.0 qts. of Extrazine II 4L (1.1-2.2 lbs. of Extrazine II DF) per acre to the rate of Bicep Lite II MAGNUM in Table 2. For purposes of calculating the total atrazine rate, Extrazine II 4L contains 0.25 lb. of atrazine per quart. Do not exceed a total of 2.5 lbs. of atrazine active ingredient per acre per calendar year. Note: Crop injury may occur if this combination is applied postemergence to corn.

Note: Check the compatibility of Bicep Lite II MAGNUM tank mixtures with Bladex or Extrazine II before mixing in spray tank by using the procedure described under Application in Water or Fluid Fertilizers. Always use Unite (or an equivalent compatibility agent) at 2.0 pts./100 gals, when using Bladex 90DF in tank mixtures with Bicep Lite II MAGNUM. Compatibility testing is especially critical when using Bladex 90DF combinations. Always add Bladex or Extrazine II to the spray tank before Bicep Lite II MAGNUM, regardless of which Bladex or Extrazine II formulation is used.

Tank Mixture of Bicep Lite II MAGNUM Alone or Bicep Lite II MAGNUM + Bladex, Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, Extrazine II, or Princep, with Gramoxone Extra, Landmaster BW, 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 Extra, Landmaster BW, or Roundup should be tank mixed with Bicep Lite II MAGNUM alone or with Bicep Lite II MAGNUM + Bladex, Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, Extrazine II, or Princep. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW 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 Bladex, Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, Extrazine II, 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. Two qts. of Bladex 4L (2.2 lbs. of 90DF), or ½ pt. of Dual or Dual II, or 0.33 pt. of Dual MAGNUM or Dual II MAGNUM, or 1.0-2.0 qts. of Extrazine II 4L (1.1-2.2 lbs. of Extrazine II DF), or 1.0 qt. of Princep 4L (1.1 lbs. of Caliber 90) per acre may be added to the rate of Bicep Lite II MAGNUM recommended in Table 7. Add Gramoxone Extra, Landmaster BW, or Roundup at labeled rates.

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

Tank Mixture of Bicep Lite II MAGNUM Alone or Bicep Lite II MAGNUM + Bladex, or Extrazine II, 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 Bladex or Extrazine II. When used as directed, 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 Bladex or Extrazine II offers the advantage indicated for each under Conventional Tillage.

Application: Apply Bicep Lite II MAGNUM with Bladex or Extrazine II before, during, or after planting, but before corn emerges, at the appropriate rate of Bicep Lite II MAGNUM in Table 7 for the burndown of small existing annual weeds. Up to 2.0 qts. of Bladex 4L (2.2 lbs. of 90DF), or 1.0-2.0 qts. of Extrazine II 4L (1.1-2.2 lbs. of Extrazine II DF) per acre may be added to the rate of Bicep Lite II MAGNUM recommended in Table 7.

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 gals. 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 qts./100 gals. 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., bromegrass, orchardgrass, rye, or timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add Gramoxone Extra at the rate of 2.5 pts./A in place of or in addition to 2,4-D, as indicated above. Do not apply Gramoxone Extra 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.

Note: When applying Bicep Lite II MAGNUM and Bladex or Extrazine II in tank mix combination, follow directions under Conventional Tillage to ensure compatibility of these products in the tank mixture. Do not exceed a total of 2.5 lbs. of atrazine active ingredient per acre per calendar year.

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

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

<sup>\*</sup>For yellow nutsedge control on fine-textured soils above 3% organic matter, apply 2.2 qts. 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*		

<sup>\*</sup>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**

## Tank Mixture with Broadstrike\*+Dual® for Preemergence Weed Control in Field Corn Only

Reduced rates of Broadstrike+Dual herbicide and Bicep Lite II MAGNUM herbicide may be tank mixed for control of several annual grasses and broadleaf weeds in field corn. In addition to the weeds listed as controlled on the Bicep Lite II MAGNUM label, this mixture will control velvetleaf and triazine-resistant populations of lambsquarters, pigweed, and velvetleaf. Weeds partially controlled by this tank mix include those under the Weeds Partially Controlled section under Bicep Lite II MAGNUM Applied Alone plus common ragweed and morningglory. Control of a few weeds can be erratic. Refer to the Weeds Controlled section of this label under Bicep Lite II MAGNUM Applied Alone for further information.

The Broadstrike+Dual and Bicep Lite II MAGNUM tank mix may be applied preplant incorporated, preemergence, or applied postemergence through the "spike" stage of corn growth, but before weed emergence. When applied postemergence to the crop, apply only with water before corn is 2 inches tall and first true leaf is unfurled. Target weeds which have emerged at the time of application may not be controlled.

# **Mixing Instructions**

Fill the spray tank 1/4-1/2 full with water or liquid fertilizer and start agitation. Add the required amount of Bicep Lite II MAGNUM and allow to become fully dispersed, then add the required amount of Broadstrike + Dual, then add the rest of the water or liquid fertilizer. For tank mixtures with liquid fertilizer, always check compatibility as described on the labels for Bicep Lite II MAGNUM and Broadstrike+Dual.

#### Precautions and Restrictions:

- · Do not apply more than 2 weeks before planting.
- . Do not apply to field corn grown for seed.
- Do not use when Counter® or Thimet® insecticides are to be applied due to the risk of severe crop injury.
- Plant corn at least 1½ inches deep.
- Refer to the product labels for Broadstrike+Dual and Bicep Lite II MAGNUM for specific use restrictions, use precautions, and rotational crop intervals. The most restrictive provisions on either label shall apply.

Table 8: Broadcast Application Rates Per Acre for Preemergence Weed Control in Field Corn

Soil Texture	Less Than 3% Organic Matter*			Greater Than 3% Organic Matter		
	Broadstrike + Dual (pts.)	+	Bicep Lite II MAGNUM (pts.)	Broadstrike + Dual (pts.)	+	Bicep Lite [[ MAGNUM (pts.)
COARSE	1.5	+	0.90	1.5	+	0.90
MEDIUM	1.5-1.75**	+	1.25	1.75	+	1.25
FINE	1.75	+	1.25	2.0	+	1.25-1.60**

<sup>\*</sup>Application on soils with <1.5% organic matter may result in unacceptable crop injury.

Follow directions in the Bicep Lite II MAGNUM Applied Alone section of this label for improved control of certain weeds.

Add 1.0-2.0 pts./A of AAtrex 4L or equivalent rates of AAtrex Nine-O for an improved spectrum of broadleaf control and for more effective burndown in no-till or minimum-till situations. Follow atrazine rate restrictions on the AAtrex label.

Note: Triazine "resistant" weeds (triazine tolerant biotypes) are controlled by the tank mixture of Broadstrike +Dual and Bicep Lite II MAGNUM.

# TANK MIXTURE WITH EXCEED® OR SPIRIT™ AND ACCENT® FOR SALVAGE WEED CONTROL IN FIELD CORN ONLY

Bicep Lite II MAGNUM + Exceed: Apply 0.90-1.25 qts./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 qts./A on coarse and 1.25 qts./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.

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.

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 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.

<sup>\*\*</sup>Use the higher rate in fields with heavy weed pressure.

# BICEP LITE II MAGNUM COMBINATIONS - GRAIN SORGHUM (SEED TREATED WITH CONCEP OR SCREEN)

Tank Mixture of Bicep Lite II MAGNUM with Gramoxone Extra, Landmaster BW, 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 Extra, Landmaster BW, or Roundup may be tank mixed with Bicep Lite II MAGNUM. When used as directed, the Gramoxone Extra portion of the tank mixture controls most emerged annual weeds and suppresses many perennial weeds. Landmaster BW 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 9. Add Gramoxone Extra, Landmaster BW, or Roundup at labeled rates.

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

Table 9: Bicep Lite II MAGNUM for Minimum-Tillage or No-Tillage Grain Sorghum\*
(Seed treated with Concep or Screen)

Soil Texture	Organic Matter	Broadcast Rate Per Acre DO NOT USE		
COARSE Sand, loamy sand, sandy loam	any level			
MEDIUM and FINE Loam, silt loam, silt, sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	less than 1.0%	DO NOT USE		
	1.0-1.5%	1.1 qts.		
	more than 1.5%	1.33-1.5 qts.		

<sup>\*</sup>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.

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

# STORAGE AND DISPOSAL

## Storage

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

#### Pesticide Disposal

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. 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 Disposal**

Refer to label on container for disposal instructions.

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.

# PRECAUTIONARY STATEMENTS

## Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. This product may cause skin sensitization reactions in some people.

## Statement of Practical Treatment

If in eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If inhaled: Move to fresh air.

If on skin: Wash with plenty of soap and water. Get medical attention.

Note to Physician: If ingested, induce emesis or lavage stomach. Administration of an aqueous slurry of activated charcoal can be considered. Treat symptomatically.

# Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- · Shoes plus socks

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

## **Engineering Control Statements**

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)(4-6)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

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

## **User Safety Recommendations**

# Users should:

- . Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing.
   As soon as possible, wash thoroughly and change into clean clothing.

## **Environmental Hazards**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters 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.

## **Ground Water 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 ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) 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 ground water.

S-Metolachlor has the potential to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

# **Surface Water Advisory**

S-Metolachlor has the potential to contaminate surface water through ground spray drift. Under some conditions, S-Metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

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

States may have in effect additional requirements regarding well-head setbacks and operational area containment.

This product may 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-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options may be used:

- 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 tile-outletted terraced field.
- 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.

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