

100-928

06/28/2000

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Bulk Booklet

**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.

Bicep MAGNUM™ TR
HERBICIDE
For weed control in field corn

ACCEPTED

JUN 28 2000

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 100-928

Active Ingredients:

Atrazine (CAS No. 1912-24-9)	22.8%
Atrazine related compounds	0.5%
S-Metolachlor (CAS No. 87392-12-9)	29.1%
Flumetsulam (CAS No. 98967-40-9)	1.0%
Other Ingredients:	46.6%
Total:	100.0%

Bicep MAGNUM TR contains 2.0 lbs. atrazine + relateds, 2.5 lbs. S-metolachlor, and 0.09 lbs. of flumetsulam active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

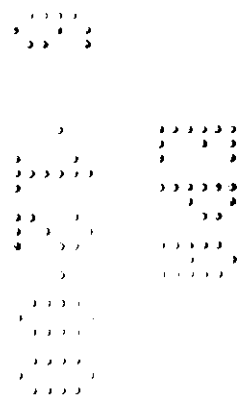
CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-928

NCP (Booklet)

[QUARK/BICEP MAGNUM TR/N-BICEP MAGNUM TR-C] - ccg - 5/31/00



DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire **Directions for Use** and the **Conditions of Sale and Warranty** before using this product. If terms are not acceptable, return the unopened product container at once.

CONDITIONS OF SALE AND WARRANTY

The **Directions for Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Novartis and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Novartis.

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DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 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
- Chemical-resistant gloves (such as nitrile or butyl)
- Shoes plus socks

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

Note: Not for sale, use, or distribution in Nassau County or Suffolk County, New York.

GENERAL INFORMATION

Bicep MAGNUM TR is a selective, soil-applied herbicide for the control of certain annual grasses and broadleaf weeds in field corn. This product may be applied before planting, preemergence, or delayed preemergence through the "spike" stage of corn growth, but before weeds emerge. Target weeds which have emerged at the time of application may not be controlled.

Following many years of continued use of atrazine (one ingredient in Bicep MAGNUM TR) and products chemically related to atrazine, biotypes of some weeds listed on this label which are normally controlled by the atrazine component have been selected which are resistant to atrazine and chemically related herbicides. Bicep MAGNUM TR contains flumetsulam, primarily for control of triazine-resistant biotypes of lambsquarters and pigweed, as well as for improved control of velvetleaf. Certain weeds have also been identified that are resistant to flumetsulam and other sulfonamides. Certain other weed biotypes have been identified as being resistant to both sulfonamides (flumetsulam) and triazines (atrazine). Where this is known or suspected, and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of Bicep MAGNUM TR in combination or in sequence with registered herbicides which will control resistant species. Consult your State Agricultural Extension Service for specific recommendations.

Bicep MAGNUM TR may be tank mixed with other herbicides specified on this label for weed control in conventional, minimum-till, and no-till corn.

Note: Tank mixtures are permitted only in those states where the tank mix partner is registered.

Bicep MAGNUM TR alone or in tank mixture with herbicides specified on this label may be applied up to 2 weeks early preplant, preplant incorporated, preplant surface, or preemergence to field corn in water or fluid fertilizer. **Do not use fertilizer as the carrier when applying Bicep MAGNUM TR to field corn in the spike stage or severe injury may result.** For burndown of existing vegetation, Bicep MAGNUM TR may be applied in tank mix combination with Gramoxone® Extra, Landmaster® BW, Roundup®, or Touchdown® and other herbicides specified on this label prior to field corn emergence.

Precautions and Restrictions for Bicep MAGNUM TR

- For optimum weed control, do not apply more than 2 weeks before planting.
- Do not use when Counter® or Thimet® insecticides are to be applied to field corn, due to risk of severe crop injury. (Unless a modified corn hybrid is used. See the **Use with Genetically Modified Field Corn Varieties** section.)
- Approved soil insecticides should be applied in a band to avoid

potential injury.

- Plant field corn at least 1½ inches deep.
- Corn inbred lines grown for hybrid seed production may be injured by Bicep MAGNUM TR. Therefore, inbred lines should be thoroughly tested for crop tolerance before treating large acreage.
- Do not apply to sweet corn or popcorn.
- Do not apply to any soil with a pH greater than 7.8 as unacceptable crop injury may result.
- Use the low end of the application rate range on sites where soils contain gravel or have a sand or loamy sand texture throughout the corn root zone in the soil profile.
- Do not use on peat or muck soils.
- Do not apply to soils that contain greater than 5% organic matter (O.M.) with a pH below 5.9 or reduced weed control may result.
- After use, thoroughly wash the tank, lines, screens, and nozzles using a commercial tank cleaner. Flush the system two times with clean water.

Precaution: Injury may occur following the use of Bicep MAGNUM TR under abnormally high soil moisture conditions during early development of field corn.

Corn growing in calcareous soils or on soils with historically high salt content (soil test results for salinity indicating electrical conductivity greater than 1.0 mmho/cm) may exhibit chlorosis and/or stunting resulting from reduced availability of iron or other micronutrients essential for normal crop vigor and growth. The presence of soil-active herbicides, such as Bicep MAGNUM TR, may cause additional stress under these conditions resulting in increased leaf chlorosis and/or crop stunting. This added stress may retard crop recovery, especially under conditions of limited rainfall. In fields which contain calcareous or high salt content soils and/or have a history of causing iron chlorosis in soybeans, growers should plant "IR" or "IMR" designated corn varieties, commonly referred to as "imidazolinone resistant" corn hybrids. On these type soils, the likelihood of crop injury can also be reduced by applying Bicep MAGNUM TR at the lower end of the recommended rate range for the soil type and/or by applying 10-14 days before planting.

Use of Bicep MAGNUM TR on soils with less than 1% O.M. may result in crop injury. Apply to fields that contain soils with less than 1% O.M. only if the risk of crop injury is acceptable.

Use with Genetically Modified Field Corn Varieties: If an "IR" or "IMR"

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designated hybrid (commonly referred to as "imidazolinone resistant") is planted, any organophosphate insecticide, including Counter or Thimet, can be applied according to label directions without increasing the likelihood of injury from Bicep MAGNUM TR. The adverse interaction between Counter or Thimet insecticides and Bicep MAGNUM TR does not occur in field corn hybrids identified as "IR" or "IMR." This adverse interaction does occur in imidazolinone tolerant "IT" or "PT" hybrids which are considered as "standard" hybrids regarding this effect. "IR" or "IMR" hybrids may also be planted to reduce the potential for injury from Bicep MAGNUM TR on soils with less than 1% organic matter or pH greater than 7.8.

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

Preharvest Interval: Do not apply Bicep MAGNUM TR within 85 days of harvest.

Maximum Application Rate: Do not exceed a total application rate of 2.2 qts. per acre of Bicep MAGNUM TR in a single crop year. Do not exceed 0.07 lb. per year cumulative application of the active ingredient flumetsulam if using Bicep MAGNUM TR in sequential or tank mix applications with other products containing flumetsulam.

Do not apply Bicep MAGNUM TR by aircraft. Apply using ground equipment only.

Avoid all direct and indirect contact with nontarget plants. Do not apply near desirable vegetation, and allow adequate distance between target area and desirable plants.

Sensitive Areas: Bicep MAGNUM TR should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, as crop injury may result. Applications should not occur during a temperature inversion because of potential for drift.

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.

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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 MAGNUM TR may reduce effectiveness. Cultivate if weeds develop in conventional tillage field corn.

Observe all precautions and limitations on the label of each product used in tank mixtures or applied sequentially with Bicep MAGNUM TR.

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.

Mixing Instructions

Thoroughly recirculate containers and bulk tanks before using. Bicep MAGNUM TR is a liquid that may be mixed with water or fluid fertilizer and applied as a spray. Bicep MAGNUM TR 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 MAGNUM TR and used to control weeds in field corn.

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

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 a closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Bicep MAGNUM TR 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

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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 MAGNUM TR to be used by the following:

$$\begin{array}{rcl}
 \underline{2,000} & \text{qts. of Bicep MAGNUM TR} & \text{qts. of Bicep MAGNUM TR} \\
 \text{lbs. of} & \times \text{ per acre} & = \text{ per ton of} \\
 \text{fertilizer} & & \text{fertilizer} \\
 \text{per acre} & &
 \end{array}$$

Pneumatic (Compressed Air) Application: High humidity, high urea concentrations, low fertilizer use rates, and/or dusty fertilizer or other problems may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix Bicep MAGNUM TR with Exxon Aromatic 200 at a rate of 2.0-2.5_pis./gal. of Bicep MAGNUM TR. 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 MAGNUM TR 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 MAGNUM TR 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 MAGNUM TR on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine Bicep MAGNUM TR with a single superphosphate (0-20-0) or treble superphosphate (0-46-0). (3) Do not use Bicep MAGNUM TR on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application: Apply 200-700 lbs. of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential in order to prevent possible crop injury or injury to subsequent rotational crops. Nonuniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil is recommended to obtain satisfactory weed control. In areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional till situations, make applications approximately 14 days before planting using rates from Table 1 to allow moisture to move the herbicide/fertilizer mixture into the soil.

Precautions: (1) To help avoid rotational crop injury, make applications as early as possible, since Bicep MAGNUM TR impregnated onto dry bulk granular fertilizers can be expected to last longer in the soil than when Bicep MAGNUM TR 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 MAGNUM TR Alone: Fill the spray tank $1/2$ - $3/4$ full with water or fluid fertilizer, add the proper amount of Bicep MAGNUM TR, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Tank Mixtures: With sufficient agitation, fill the spray tank $1/2$ - $3/4$ full with water or fluid fertilizer and add the proper amount of Bicep MAGNUM TR. Once uniformly dispersed, add Banvel®, AAtrex®, or Princep®; next add Dual®, Dual II®, Dual MAGNUM®, or Dual II MAGNUM®; then add Gramoxone Extra, Landmaster BW, Roundup, 2,4-D, or Touchdown, depending on the tank mix combination desired; and finally, add the rest of the water or fluid fertilizer. When Bladex® or Extrazine® II is used in the tank mixture, add it before Bicep MAGNUM TR, unless otherwise specified. (See **Note** section under **Bicep MAGNUM TR Combinations – Field Corn** for further Bladex and Extrazine II mixing instructions.) Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Compatibility Test: Check the compatibility of Bicep MAGNUM TR and tank mixtures in fluid fertilizer by mixing proportionate quantities in a small container, as described below, before mixing in the spray tank. Nitrogen solutions or complete fluid fertilizers may replace all or part of the water in the spray. Since liquid fertilizers can vary, even within the same analysis, **always check compatibility each time before reuse.** Be especially careful when using complete suspension or fluid fertilizers, as serious compatibility problems are more apt to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gals./A. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1.0 pt. of fertilizer to each of 2 one-qt. jars with tight lids.
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 pts./100 gals. spray). Shake or stir gently to mix.
3. To **both** jars, add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

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Dry herbicides: For each pound to be applied per acre, add 1.4 teaspoons to each jar.

Liquid herbicides: For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15 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 2 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 herbicide(s) in water before addition, or (B) add $\frac{1}{2}$ of the compatibility agent to the fertilizer and the other $\frac{1}{2}$ to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If still incompatible, do not use the mixture.
5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the directions in the **Storage and Disposal** section at the end of 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.

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

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

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 gals. 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 gals. of spray mixture per acre. Maximum recommended 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 are recommended to 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 recommended 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, angles of 80° or 110° are recommended. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles or tips.

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BICEP MAGNUM TR APPLIED ALONE

Early Preplant, Preplant Surface-Applied, Preplant Incorporated, Preemergence, or Delayed Preemergence – Field Corn

Bicep MAGNUM TR will control or partially control the following weeds, including triazine resistant biotypes.

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

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

**When 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.

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

1. **Thoroughly till moist soil** to destroy germinating and emerged weeds. If Bicep MAGNUM TR is to be applied preplant incorporated, this tillage may be used to incorporate Bicep MAGNUM TR if uniform 2-inch incorporation is achieved.
2. Plant crop into moist soil **immediately after tillage**. If Bicep MAGNUM TR is to be used preemergence, apply at planting or immediately after planting.

3. 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.
4. If irrigation is not possible and rain does not occur within 2 days after application, weed control may be decreased. Under these conditions, a uniform, shallow cultivation is recommended as soon as weeds emerge.
5. For large-seeded broadleaf species, or those which are listed as partially controlled, an application of an approved postemergence herbicide should be made, if needed, following an application of Bicep MAGNUM TR.

Atrazine Rate Restrictions

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.

The rate of atrazine in the highest use rate of Bicep MAGNUM TR is 1.1 lbs. a.i. per acre.

Note: For purposes of calculating total atrazine active ingredient applied, Bicep MAGNUM TR contains 2.0 lbs. a.i. atrazine + relateds per gal. (0.5 lb. a.i./qt.).

If Bicep MAGNUM TR 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 SCS)**

If conservation tillage is practiced, leaving at least 30% of the soil covered with plant residues at planting, apply a maximum of 2 lbs. of atrazine/A as a broadcast spray.

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

- **On Land Not Highly Erodible**

Apply a maximum of 2 lbs. 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 lbs. a.i./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 lbs. a.i. per acre per calendar year.

Application Timings

Early Preplant: Apply Bicep MAGNUM TR as a single broadcast application no earlier than 2 weeks before planting. Refer to Table 1 for rates according to soil texture. For all soils, Bicep MAGNUM TR must be tank mixed with a contact herbicide (e.g., Gramoxone Extra, Touchdown, or Roundup) if weeds are present at the time of treatment. If large-seeded broadleaf weeds 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 sequentials to Bicep MAGNUM TR. If the postemergence product contains atrazine, do not exceed the maximum use rates for that soil or location.

Table 1: Bicep MAGNUM TR – Early Preplant – Field Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam.	1.75-2.0 qts./A
MEDIUM Loam, silt loam, silt	2.0 qts./A
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.0-2.2 qts./A

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

Preplant Surface: Just before planting, apply uniformly to the soil surface.

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Preplant Incorporated: Just before planting, apply to the soil and incorporate into the top 2 inches of the soil, 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.

Delayed Preemergence: If adverse environmental conditions (abnormally wet or dry) prevented the normal preemergence application, a delayed preemergence application may be applied after planting through the corn spike stage (no unfurled corn leaves). Emerged weeds may not be adequately controlled.

Table 2: Bicep MAGNUM TR – Preplant Surface, Preplant Incorporated, or Preemergence – Field Corn

Soil Texture	Broadcast Rate Per Acre	
	Less Than 3% Organic Matter	3% Organic Matter or Greater
COARSE Sand, loamy sand, sandy loam	1.6 qts.	1.75-2.0 qts.
MEDIUM Loam, silt loam, silt	1.75-2.0 qts.	2.0 qts.
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.0 qts.	2.0-2.2 qts.*
Muck or peat soils (more than 20% organic matter)	DO NOT USE	

*For more effective yellow nutsedge control on fine-textured soils above 3% organic matter: Apply 2.2 qts. of Bicep MAGNUM TR per acre.

Notes: (1) In the event of escape of annual weeds following a treatment of Bicep MAGNUM TR applied alone or in tank mix combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., AAtrex, Accent®, Beacon®, Banvel, Basagran®, Brominal®, Buctril®, Clarity®, Exceed®, Marksman®,

Spirit™, or 2,4-D. If the postemergence treatment includes a herbicide used in the Bicep MAGNUM TR tank mix 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 lbs. a.i./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 MAGNUM TR, do not exceed a total of 2.5 lbs. a.i./A of atrazine per year. (4) To avoid potential illegal residues, do not apply more than a total of 3.75 lbs. a.i./A per season of S-metolachlor contained in Dual MAGNUM or Bicep MAGNUM brands. If other brands containing metolachlor (Bicep®, Bicep II®, Dual, or Dual II) are applied to the same acre, multiply lbs. a.i. of metolachlor by a factor of 0.625 to determine the amount of S-metolachlor. Do not exceed a sum total of 3.75 lbs. a.i./A per growing season.

Note: To avoid possible illegal residues, do not graze or feed forage from treated areas for 85 days following application.

ROTATIONAL CROPS

The following crops may be planted after the indicated interval following application of Bicep MAGNUM TR.

Do not rotate to food or feed crops other than those listed below for the specified Rotational Interval.

Crop	Rotational Interval	Notes
Corn (field, seed)	0 months	1, 4, 5
Popcorn	9 months	
Soybeans, Peanuts	Spring of the following year	3
Sorghum	12 months	4, 5
Tobacco, Dry Beans, Barley, Oats, Rye, Wheat, Small-Seeded Legumes	May be injured if planted spring of the following year	
Cotton, Sweet Corn, Sunflowers	18 months	2
Sugar Beets, Vegetables	26 months (plus a successful field bioassay)	

Notes: (1) If treated crop is lost due to poor germination, hail, flood, insects, etc., corn may be replanted immediately. If the original application was broadcast, 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) 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) If applied after June 10, do not rotate with crops other than field corn or sorghum the next year, or crop injury may occur. (5) In the High Plains and Intermountain areas of the West, where rainfall is sparse and erratic or where irrigation is required, use only when field corn or sorghum is to follow treated field corn, or a crop of untreated field corn or sorghum is to precede other rotational crops.

BICEP MAGNUM TR COMBINATIONS – FIELD CORN

Always follow label instructions for tank mix products when mixing with Bicep MAGNUM TR.

Note: Check the compatibility of Bicep MAGNUM TR tank mixtures with Bladex or Extrazine II before mixing in spray tank by using the procedure

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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 MAGNUM TR. Compatibility testing is especially critical when using Bladex 90DF combinations. Always add Bladex or Extrazine II to the spray tank before Bicep MAGNUM TR, regardless of which Bladex or Extrazine II formulation is used.

Conventional Tillage

Tank Mixture with Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, AAtrex, Princep, Bladex, or Extrazine II

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 MAGNUM TR recommended in Tables 1 or 2 when heavy infestations of yellow nutsedge, sandbur, or seedling johnsongrass are expected.

AAtrex (4L or Nine-O®): Add up to 1.0 qt. of AAtrex 4L (1.1 lbs. of Nine-O) per acre to the rate of Bicep MAGNUM TR recommended in Tables 1 or 2 in the southeastern U.S. where high rainfall can shorten the duration of control of broadleaf weeds, and in all areas where heavy infestations of cocklebur, morningglory, velvetleaf, or other broadleaf weeds claimed are expected. Do not exceed the atrazine rate limits specified in the **Atrazine Rate Restrictions** section.

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 MAGNUM TR recommended in Tables 1 or 2 in the northeastern U.S. where heavy infestations of crabgrass or fall panicum are expected.

Bladex (4L or 90DF): Add up to 1.0 qt. of Bladex 4L (1.1 lbs. of 90DF) per acre to the rate of Bicep MAGNUM TR recommended in Tables 1 or 2. **Note:** Do not apply Bicep MAGNUM TR + Bladex when corn is emerging or in the spike stage or crop injury may occur. Refer to the Bladex label for **Cyanazine Rate Limits** in effect for the year of application.

Extrazine II: Add 1.0-1.3 qts. of Extrazine II 4L (1.1-1.5 lbs. of Extrazine II DF) per acre to the rate of Bicep MAGNUM TR 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:** Do not apply Bicep MAGNUM TR + Extrazine II when corn is emerging or in the spike stage or corn injury may occur. Refer to the Extrazine II label for **Cyanazine Rate Limits** in effect for the year of application.

Minimum-Tillage or No-Tillage Systems

Tank Mixture of Bicep MAGNUM TR Alone or Bicep MAGNUM TR + AAtrex, Bladex, Dual, Dual II, Dual MAGNUM, Dual II MAGNUM, Extrazine II, or Princep, with Gramoxone Extra, Landmaster BW, Roundup, or Touchdown

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, Roundup, or Touchdown should be tank mixed with Bicep MAGNUM TR alone or with Bicep MAGNUM TR + AAtrex, 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, Roundup, or Touchdown combinations will control emerged annual and perennial weeds when applied as directed on its label. The Bicep MAGNUM TR portion of the tank mixture provides preemergence control of the weeds listed on this label in the **Bicep MAGNUM TR Alone** section for corn. The addition of AAtrex, 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 3. AAtrex 4L at 1-2 pts. (or equivalent rates of AAtrex Nine-O), or up to 1.0 qt. of Bladex 4L (1.1 lbs. of 90DF), or 1/2 pt. of Dual or Dual II, or 0.33 pt. of Dual MAGNUM or Dual II MAGNUM, or 1.0-1.3 qts. of Extrazine II 4L (1.1-1.5 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 MAGNUM TR recommended in Table 3. Add Gramoxone Extra, Landmaster BW, Roundup, or Touchdown at labeled rates. If AAtrex or another form of atrazine is added for an improved spectrum of weed control or for more effective burndown in no-till or minimum-till situations, follow rate restrictions on the AAtrex label.

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

Tank Mixture of Bicep MAGNUM TR Alone or Bicep MAGNUM TR + AAtrex, Bladex, or Extrazine II, with 2,4-D or 2,4-D + Banvel

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

Application: Apply Bicep MAGNUM TR with AAtrex, Bladex, or Extrazine II before, during, or after planting, but before corn emerges, at the appropriate rate of Bicep MAGNUM TR in Table 3 for the burndown of small existing annual weeds. AAtrex 4L at 1-2 pts. (or equivalent rates of AAtrex

Nine-O) or up to 1.0 qt. of Bladex 4L (1.1 lbs. of 90DF), or 1.0-1.3 qts. of Extrazine II 4L (1.1-1.5 lbs. of Extrazine II DF) per acre may be added to the rate of Bicep MAGNUM TR recommended in Table 3. If AAtrex or another form of atrazine is added for an improved spectrum of weed control or for more effective burndown in no-till or minimum-till situations, follow rate restrictions on the AAtrex label.

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. More than one application of Gramoxone Extra may be needed for satisfactory control of perennial sods, such as orchardgrass. Refer to the Gramoxone Extra label. 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.

Table 3: Bicep MAGNUM TR – Minimum-Tillage or No-Tillage Field Corn

Soil Texture	Broadcast Rate Per Acre
COARSE Sand, loamy sand, sandy loam	1.75 qts.
MEDIUM Loam, silt loam, silt	2.0 qts.
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	2.0-2.2 qts.*
Muck or peat soils	DO NOT USE

*For more effective yellow nutsedge control on fine-textured soils above 3% organic matter, apply 2.2 qts. of Bicep MAGNUM TR per acre.

Rotational Crops: Refer to the crop rotation instructions in the **Bicep MAGNUM TR Alone** section, as well as those for the tank mix partners, and follow the most restrictive recommendations.

Notes: (1) In the event of escape of annual weeds following a treatment of Bicep MAGNUM TR applied alone or in tank mix combination, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., AAtrex, Accent, Beacon, Banvel, Basagran, Brominal, Buctril, Clarity, Exceed, Marksman, Spirit, or 2,4-D. If the postemergence treatment includes a herbicide used in the Bicep MAGNUM TR tank mix 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 lbs. a.i./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 MAGNUM TR, do not exceed a total of 2.5 lbs. a.i./A of atrazine per year. (4) To avoid potential illegal residues, do not apply more than a total of 3.75 lbs. a.i./A per season of S-metolachlor contained in Dual MAGNUM or Bicep

MAGNUM brands. If other brands containing metolachlor (Bicep, Bicep II, Dual, or Dual II) are applied to the same acre, multiply lbs. a.i. of metolachlor by a factor of 0.625 to determine the amount of S-metolachlor. Do not exceed a sum total of 3.75 lbs. a.i./A per growing season.

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

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

Statement of Practical Treatment

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. If person is unconscious, do not give anything by mouth and do not

induce vomiting.

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

If in eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

Note to Physician: If ingested, induce emesis or lavage stomach. Treat symptomatically.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (such as nitrile, butyl, neoprene, and/or barrier laminate)
- Shoes plus socks

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

Engineering Control Statements

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

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

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 water or rinsate. This pesticide contains atrazine, which has been shown to be toxic to aquatic invertebrates. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas.

Ground Water Advisory

Bicep MAGNUM TR contains the active ingredients atrazine, S-metolachlor, and flumetsulam.

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.

Flumetsulam has been identified in ground water sampling from a field research site under vulnerable conditions. There is the possibility that flumetsulam may leach through soil to ground water, especially where soils are coarse and ground water is near the surface.

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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 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.
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.

AAtrex®, Beacon®, Bicep®, Bicep II®, Bicep MAGNUM™, Bicep MAGNUM™ TR, Caliber 90®, 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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NCP

(Booklet)

Revised 4/99 - add ground water statement
and rate limitations for flumetsulam

Revised 2/00 - delete postemergence sections;
add delayed preemergence

Revised 5/00 - revised atrazine ai; added bulk
container label

[QUARK/BICEP MAGNUM TR/N-BICEP MAGNUM TR-C] - ccg - 5/31/00

BULK CONTAINER LABEL

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

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

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

Bicep MAGNUM™ TR

HERBICIDE

For weed control in field corn

Active Ingredients:

Atrazine (CAS No. 1912-24-9)	22.8%
Atrazine related compounds05%
S-metolachlor (CAS No. 87392-12-9)	29.1%
Flumetsulam (CAS No. 98967-40-9)	1.0%
<u>Other Ingredients:</u>	<u>46.6%</u>
Total:	100.0%

Bicep MAGNUM TR contains 2.0 lbs. atrazine + relateds, 2.5 lbs. S-metolachlor and 0.09 lb. of flumetsulam active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements at end of label.

EPA Reg. No. 100-928

EPA Est. (sticker)

Product ID. 81174

ALWAYS RECIRCULATE BEFORE USE

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire **Directions for Use** and the **Conditions of Sale and Warranty** before using this product. If terms are not acceptable, return the unopened product container at once.

CONDITIONS OF SALE AND WARRANTY

The **Directions for Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Novartis and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Novartis.

Container Disposal

Thoroughly clean container before reuse, **unless this is a Novartis refillable container. If this is a Novartis refillable container and is to be refilled, do not rinse or introduce any pesticide other than Bicep MAGNUM TR.** Reseal and return the container to an authorized Novartis refilling facility. If the Novartis container is not to be refilled, triple rinse (or equivalent), and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

To be used in accordance with directions for use in Bicep MAGNUM TR label booklet. See Bicep MAGNUM TR label booklet for pesticide disposal instructions.

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.

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.

Chemigation Prohibition

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

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing.

Statement of Practical Treatment

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2

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glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not induce vomiting or give anything by mouth.

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

If in eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

Note to Physician: If ingested, induce emesis or lavage stomach. Treat symptomatically.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate. 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 MAGNUM TR contains the active ingredients atrazine, S-metolachlor, and flumetsulam.

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.

Flumetsulam has been identified in ground water sampling from a field research site under vulnerable conditions. There is the possibility that flumetsulam may leach through soil to ground water, especially where soils are coarse and ground water is near the surface.

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.
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.

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NCP Bulk Container

_____ GALLONS
U.S. Standard Measure

[QUARK/BICEP MAGNUM TR/N-BICEP MAGNUM TR-C] - ccg - 5/31/00