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Systems Integration Group, Inc.

US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460  <b>NOTICE OF PESTICIDE:</b> <input checked="" type="checkbox"/> REGISTRATION <input type="checkbox"/> REREGISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)	EPA REGISTRATION NO. 100-947	DATE OF ISSUANCE MAY - 5 1999
	TERM OF ISSUANCE Conditional	
	NAME OF PESTICIDE PRODUCT Broadstrike® Dual Magnum™ Herbicide	

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

NOVARTIS Crop Protection, Inc  
 P.O. Box 18300  
 Greensboro, NC 27419

**NOTE:** Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

- This product is registered in accordance with FIFRA Section 3(c)(7)(C) provided that you:
1. Revise the description of the "Compatibility Test" on page 11 of the enclosed label to reflect the attached description that includes pesticides as well as fertilizers that may be used as tank mixtures.
  2. Add the appropriate Trademark symbol to the name "Broadstrike®" in the name of this product.
  3. Add the phrase "EPA Registration No. 100-947" to the label before you release the product for shipment.
  4. Submit one (1) copy of the final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Joanne I. Miller  
 Product Manager (23)  
 Herbicide Branch  
 Registration Division (7505C)

Attachment (1)  
 Enclosure (1)  
 ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL <i>Joanne I. Miller</i>	DATE MAY - 5 1999
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Broadstrike Dual MAGNUM™

HERBICIDE

A selective herbicide for the control of annual grass and broadleaf weeds in field corn and soybeans.

Active Ingredients

Flumetsulam: (CAS No. 98967-40-9) .....	3.2%
S-metolachlor (CAS No. 87392-12-9) .....	78.2%
<u>Other ingredients</u> .....	<u>18.6%</u>
Total	100.0%

Broadstrike Dual MAGNUM contains 0.30 pounds of flumetsulam and 7.3 pounds of S-metolachlor active ingredient per gallon.

**KEEP OUT OF REACH OF CHILDREN**

**WARNING/AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

EPA Reg. No. 100-947

EPA Est. 070989-MO-001

See additional precautionary statements and directions for use inside booklet.

2.5 GALLONS

U.S. Standard Measure

NCP

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated**

MAY - 5 1999

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

100-947

## 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.

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### CONDITIONS OF SALE AND WARRANTY

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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**

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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 over long-sleeved shirt and long pants
- Chemical-resistant gloves such as nitrile, butyl, neoprene and/or barrier laminate
- Socks plus chemical-resistant footwear
- Protective eyewear (goggles or face shield)

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

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

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

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## GENERAL INFORMATION

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Broadstrike Dual MAGNUM herbicide is a selective soil applied product for the control of annual grass and broadleaf weeds in field corn and soybeans. Broadstrike Dual MAGNUM may be preplant surface applied, preplant incorporated, or applied as a preemergence treatment in water or liquid fertilizer and can be impregnated on dry bulk fertilizer. Broadstrike Dual MAGNUM controls broadleaf weeds during germination or soon after emergence and controls grass weeds during germination. Susceptible weeds exposed to Broadstrike Dual MAGNUM either die or remain non-competitive with the crop. Adequate soil moisture is necessary for effective herbicidal activation, because uptake and translocation of Broadstrike Dual MAGNUM involves uptake by both emerging shoots and/or roots. Broadstrike Dual MAGNUM may provide control of susceptible broadleaf weeds which emerge after application.

### General Use Precautions

Corn inbred lines grown for hybrid seed production may be injured by Broadstrike Dual MAGNUM. Therefore, inbred lines should be thoroughly tested for crop tolerance before treating large acreage.

Following the repeated use of this product or other products with the same mode of action, naturally occurring biotypes of some weeds listed on this label may not be controlled. When there is known occurrence of ALS resistant or tolerant biotypes, this product should be tank mixed or applied sequentially with a labeled herbicide having a different mode of action to ensure control of these weeds.

Do not apply to sweet corn or popcorn.

Do not apply to emerged soybeans.

Do not graze or feed treated soybean forage, hay, or straw to livestock.

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

**Preharvest Interval:** Do not apply Broadstrike Dual MAGNUM within 85 days of harvest.

**Maximum Application Rate:** Do not exceed a total application rate of 1.85 pts./A of Broadstrike Dual MAGNUM in a single crop year (equivalent to 0.07 lbs. of flumetsulam active ingredient and 1.69 lbs. S-Metolachlor active ingredient).

**Do not aerially apply Broadstrike Dual MAGNUM. Apply using ground equipment only.**

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

Do not use flood irrigation to apply or incorporate this product.

### **Safe Pesticide Handling Procedures**

- Calibrate sprayers only with clean water and away from well sites.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- Mix only enough product for the job at hand.
- Avoid over filling the spray tank.
- Do not discharge excess material on soil at a single spot in the field or at the mixing/loading station.
- Dilute and agitate excess spray solution and apply on an approved crop site.
- Triple rinse the pesticide container. Add the rinsate to the spray mix.

### **Cleaning Equipment After Application**

Because some crops are extremely sensitive to low rates of Broadstrike Dual MAGNUM, special attention must be given to cleaning equipment before spraying a crop other than those registered for use on this label. Mix only as much spray solution as needed. Immediately after spraying, clean equipment thoroughly using this procedure:

1. Flush tank, hoses, boom, and nozzles with clean water.
2. Prepare a cleaning solution of one gallon of household ammonia per 50 gallons of water. Many commercial spray tank cleaners may be used as well. Please read Novartis brochure "Clean It Up! - A Guide To Cleaning Your Sprayers (NCP 175-00088-A 3/97) for a partial listing of approved tank cleaners and more information about proper tank cleaning procedures. Do not use chlorine based cleaners such as Clorox®.
3. When available, use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. Completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for **at least 15 minutes**. All visible deposits must be removed from the spraying system.
4. Flush hoses, spray lines, and nozzles for at least one minute with the cleaning solution.

5. Dispose of rinsate from steps 1-3 in an appropriate manner. Spray the cleaning solution on untreated field corn or soybeans or return to a rinsate tank for later use as make-up water for spraying field corn or soybeans. When spraying cleaning solution, refer to specific crop directions for use for application timing, rates, limitations, etc.
6. Repeat steps 2-5.
7. Remove nozzles, screens, and strainers and clean separately in the ammonia cleaning solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

**Note:** If the tank is equipped with the proper number of correctly mounted 360° tank washing nozzles which are attached to a dedicated rinsing system, less cleaning solution than a full tank may be used. Use sufficient cleaning solution to thoroughly rinse all surfaces. Start the sprayer agitation and recirculate the cleaning solution for at least 15 minutes. Flush the spray boom with the cleaning solution. Repeat the rinsing procedure as outlined in this Note 1-2 times, including flushing the spray boom with the cleaning solution. After the last flush of the system, remove nozzles, screens, and strainers and clean separately in fresh cleaning solution.

### **Application/Incorporation**

Uneven application or incorporation of Broadstrike Dual MAGNUM can result in erratic weed control or crop injury. Over application may result in crop injury or rotational crop damage from soil residue.

If Broadstrike Dual MAGNUM is incorporated, any supplemental tillage before planting must not exceed the depth of incorporation.

### **Tank Mixing**

**Note:** Do not exceed 0.07 lb. per year cumulative application of the active ingredient flumetsulam if using in sequential applications or tank mixtures with other products.

Broadstrike Dual MAGNUM may be tank-mixed or followed by overlay or postemergence treatments registered for use on corn or soybeans to broaden the spectrum of weeds controlled. Follow all applicable use directions, precautions, restrictions and limitations on the labels of each product used in tank mixtures. Tank mixtures are permitted only in those states where the tank-mix partner is registered. Use Broadstrike Dual MAGNUM only in tank mixtures which are compatible. To determine compatibility, see **Mixing Instructions, Compatibility Test** section of this label.



Where directions for use on corn allow a tank mixture with AAtrex® herbicide formulations, other brands of atrazine may also be used. Follow the rates, recommendations, and limitations on the product label for AAtrex or other atrazine product used. **Note:** Certain states may have established rate limitations for atrazine 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.

**Adverse Weather Conditions**

Extended cold wet conditions (soil temperature below 50°F and excessive rainfall with wet soil conditions) following preemergence application of Broadstrike Dual MAGNUM to field corn which persist during germination and early crop development may result in crop injury. Injury symptoms, which include yellowing of leaves and/or crop stunting, are usually temporary and affected corn plants usually recover without affecting yield.

When applications are made under adverse (dry or cold) conditions or when less susceptible species are treated, partial weed control may be observed. Partial weed control is a visual reduction in weed competition (reduced population, size, and/or vigor) as compared to an untreated area. If these conditions exist, a cultivation can provide enhanced control.

Dry weather following preplant surface or preemergence applications of Broadstrike Dual MAGNUM may reduce effectiveness. If sufficient activating rainfall or overhead irrigation does not occur within 7 to 10 days of application, rotary hoe, harrow, or shallowly cultivate to incorporate the herbicide lightly into the soil. Use a preplant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected.

**Corn Planting Depth**

When using Broadstrike Dual MAGNUM, corn seed must be planted at least 1 1/2 inches deep.

**Soil Conditions**

Use the lowest end of the application rate range in the use directions on treatment sites where soils contain gravel or have a sand or loamy sand texture throughout the soil profile.

Do not use on peat or muck soils.

Do not apply to soils that contain greater than 5% O.M. with a pH below 5.9 or reduced weed control will result.

Do not apply to any soil with a pH greater than 7.8 as unacceptable crop injury may result.

Corn or soybeans 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 micro nutrients essential for normal crop vigor and growth. The presence of soil-active herbicides, such as Broadstrike Dual MAGNUM 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 soybean varieties with known tolerance to iron deficient soils or plant "IR" or "IMR" designated corn varieties, commonly referred to as "imidazolinone resistant" hybrids. On these type soils, the likelihood of crop injury can also be reduced by using the lower end of the recommended rate range for the soil type and/or by applying Broadstrike Dual MAGNUM 10-14 days prior to planting.

**Corn Only** - Use of Broadstrike Dual MAGNUM on soils with less than 1.5% O.M. may result in crop injury. Apply to fields that contain soils with less than 1.5% O.M. only if the risk of crop injury is acceptable.

#### **Use With Other Products**

Corn - soil insecticides should be applied in a T-band or a surface band to avoid potential crop injury when Broadstrike Dual MAGNUM is used for annual grass and broadleaf weed control in corn. Do not use Broadstrike Dual MAGNUM on corn when Counter® (terbufos) or Thimet® (phorate) insecticide are to be applied as severe crop injury may occur.

If any ALS (acetolactate synthase) inhibiting herbicides such as Pursuit®, Preview®, Canopy®, Classic®, Scepter®, Squadron®, etc. were applied the previous crop year, apply Broadstrike Dual MAGNUM to corn only if the rotational restrictions to corn for those products have been met.

Corn previously treated with Broadstrike Dual MAGNUM that is stressed or damaged by conditions such as cold weather, hail, drought, water saturated soil, disease, or insects should not be treated with Accent®, Beacon®, Permit®, Exceed®, Basis®, Spirit®, NorthStar™ or other acetolactate synthase (ALS) inhibiting herbicides as this may cause further crop injury.

#### **Use With Genetically Modified Corn Varieties**

If an "IR" or "IMR" 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 to corn

from Broadstrike Dual MAGNUM. The adverse interaction between Counter or Thimet insecticides and Broadstrike Dual MAGNUM does not occur in corn hybrids identified as "IR" or "IMR". This adverse interaction does occur in imidazolinone tolerant "IT", "PT" hybrids which are considered as "standard" hybrids regarding this effect. "IR" or "IMR" hybrids may also be planted to reduce injury to corn from Broadstrike Dual MAGNUM on soils with less than 1.5% organic matter.

**Do not apply under conditions which favor runoff or wind erosion of soil containing Broadstrike to nontarget areas. To prevent off-site movement due to runoff or wind erosion:**

- Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
- Do not apply to impervious substrates such as paved or highly compacted surfaces, or frozen or snow covered ground.
- Do not apply to soils when saturated with water.
- 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.

**Do not apply when weather conditions favor drift to nontarget sites. To minimize spray drift to nontarget areas:**

- Use low pressure application equipment capable of producing a large droplet spray.
- Do not use nozzles that produce a fine droplet spray.
- Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet sprays.
- Keep ground-driven spray boom as low as possible above the target surface.
- Spray when conditions are calm or wind speed is low. Do not spray when wind is gusting or steady wind speed is greater than 10 mph.

### Rotation Crop Restrictions

The following crops may be planted after the indicated interval following application of Broadstrike Dual MAGNUM.

Crop	Rotational Crop Interval
soybeans, corn (field, silage, seed)	0 months
alfalfa, dry beans, peas, peanuts, sweet potatoes	4 months
barley, oats, rye, wheat	4 1/2 months
rice, popcorn, tobacco	9 months
grain sorghum, potatoes	12 months
sweet corn, sunflower, cotton	18 months

**Note:** Rotation to sugar beets, canola, and all other crops requires a 26-month rotation interval and a successful field bioassay.

**Field Bioassay Instructions:** Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop variety across the field previously treated with Broadstrike Dual MAGNUM. Plant the strips perpendicular to the direction Broadstrike Dual MAGNUM was applied. The strips should also be located so that different field conditions are encountered, including differences in soil texture, pH, and drainage. If the crop does not show visible symptoms of injury, stand reduction, and/or yield reduction, the field can be seeded with the test crop in the growing season following the bioassay. If visible injury, stand reduction, or yield reduction occurs, the test crop should not be seeded, and the bioassay must be repeated the next growing season.

**Soil Textures and Herbicide Rates**

Where rates are based on coarse-, medium-, or fine-textured soils, it is understood that soil textural classes are generally categorized as follows:

Coarse	Medium	Fine
Sand	Loam	Silty Clay Loam, Sandy Clay
Loamy Sand	Silt	Sandy Clay Loam, Clay Loam
Sandy Loam	Silt Loam	Silty Clay, Clay

Within rate ranges, use the lower rates on coarse-textured soils or soils low in organic matter and use the higher rates on soils relatively fine-textured or high in organic matter.

**Mixing Instructions**

**Broadstrike Dual MAGNUM Alone:** Fill the spray tank 1/2 to 3/4 full with water or fluid fertilizer. Add the required amount of Broadstrike Dual MAGNUM, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

**Tank Mixtures:** Fill the spray tank 1/4 full of water and start agitation. Add Broadstrike Dual MAGNUM followed by the appropriate tank mix product and the remainder of the water. Refer to the label of the product to be tank mixed with Broadstrike Dual MAGNUM for any special tank mixing instructions. For tank mixtures with liquid fertilizer, always check compatibility with the liquid fertilizer as described below before mixing in spray tank. For all tank mixtures, agitate during mixing and application to maintain a uniform spray mixture.

**Tank Mixtures With 2,4-D or AAtrex for Field Corn:** Fill the spray tank 1/4 full of water and start agitation. Add 2,4-D or AAtrex and allow to become dispersed, add Broadstrike Dual MAGNUM, then add other products being used and the rest of the water. For tank mixtures with AAtrex, fluid fertilizers may replace all or part of the water as carrier. For tank mixtures with AAtrex, see additional mixing instructions on the label for AAtrex. For tank mixtures with liquid fertilizer, always check compatibility with the liquid fertilizer as described below before mixing in spray tank. For all tank mixtures, agitate during mixing and application to maintain a uniform spray mixture.

**Compatibility Test:** Since liquid fertilizers can vary, even within the same analysis, always check compatibility with herbicide(s) each time before use. Be especially careful when using complete suspension or fluid fertilizers as serious compatibility problems are more likely to occur. Water from some sources may also contribute to mixing problems. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gallons per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.
2. To one of the jars add 1/4 teaspoon or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (1/4 teaspoon is equivalent to 2 pints per 100 gallons 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:

**Dry Herbicides** - For each pound to be applied per acre, add 1.5 level 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 two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) slurry the dry herbicide(s) in water before addition, or (b) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, do not use the mixture.

## Application Instructions

### Application Timing

Application times for Broadstrike Dual MAGNUM are indicated below. Broadstrike Dual MAGNUM may also be applied in tank mix combination with other pesticides provided the label of the companion product allows such application timing. Refer to the tank mix product label to determine if the application times listed below are permitted.

**Preplant Surface-Applied:** For minimum-tillage or no-tillage systems only, Broadstrike Dual MAGNUM alone and certain tank mixtures of Broadstrike Dual MAGNUM may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide such as Gramoxone® Extra, Roundup®, Roundup Ultra or Touchdown®. Observe directions for use, precautions, and restrictions on the label of the contact herbicide. 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.

**Preplant Incorporated:** Apply Broadstrike Dual MAGNUM to the soil and incorporate into the top 2 inches of soil within 14 days before planting using a finishing disk, harrow, rolling cultivator, field cultivator, or similar implement capable of providing uniform 2 inch incorporation. If crop is to be planted in bedded culture, apply and incorporate Broadstrike Dual MAGNUM after beds are formed. **Precaution:** To avoid crop injury, do not apply mixtures of Broadstrike Dual MAGNUM and fertilizer in bedded culture.

**Preemergence:** Apply Broadstrike Dual MAGNUM during planting (behind the planter) or after planting, but before weeds or crops emerge.

### Spike Stage (Corn Only):

Broadstrike Dual MAGNUM may be applied from corn emergence (ground cracking stage) up to 2 inches in height (before the first leaf has completely unfurled), but before weed emergence. Use water only as the carrier.

*Precaution: During periods of corn emergence, do not apply with liquid fertilizer as severe crop injury may result.*

### Ground Application

Apply Broadstrike Dual MAGNUM alone or in tank mixtures by ground equipment in a minimum of 10 gallons of spray mixture per acre unless otherwise specified.

Use sprayers that provide accurate and uniform application. For tank mixtures of Broadstrike Dual MAGNUM with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

**Band Application:** Calculate the amount of herbicide needed for band treatment by the formula:

$$\begin{array}{r}
 \text{Band width in inches} \\
 \text{-----} \\
 \text{Row width in inches}
 \end{array}
 \times
 \begin{array}{r}
 \text{Broadcast rate} \\
 \text{per acre}
 \end{array}
 =
 \begin{array}{r}
 \text{Amount needed} \\
 \text{per acre of field}
 \end{array}$$

**Low Carrier Application (Broadcast Ground Application Only)**

Use sprayers such as Ag-Chem RoGator®, Hagie, John Deere 4700 Sprayer, Melroe Spra-Coupe, Tyler Patriot™, or Willmar Air Ride® to 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 to 40 psi at the nozzles, and (2) provide sufficient agitation in tank to keep mixture in suspension. Use a minimum of 5 gallons of spray mixture per acre. Maximum recommended sprayer speed is 15 mph. Rinse sprayer thoroughly with clean water immediately after each use.

**Note:** Low pressure nozzles are recommended to reduce drift and increase application accuracy. Care should be taken when using automatic rate controlling devices to spray the material within the rated working pressure and flow ranges of the nozzles 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° to 110° are recommended. Always read and follow the manufacturer's directions for optimum setup and performance of their nozzles to tips.

**Application With Dry Bulk Granular Fertilizers**

When applying Broadstrike Dual MAGNUM with dry bulk granular fertilizers, follow all applicable directions for use and precautions on this label.

Many dry bulk granular fertilizers may be impregnated or coated with Broadstrike Dual MAGNUM for preplant incorporated or preplant surface application to control weeds in crops on the label for Broadstrike Dual MAGNUM.

Compliance with applicable federal and state laws and regulations relating to blending, registration, labeling, and application of pesticides mixed with dry bulk granular fertilizer is the responsibility of the individual and/or company distributing or offering the herbicide/fertilizer mixture for sale.

Prepare the granular fertilizer/herbicide mixtures by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Broadstrike

Dual MAGNUM and mixtures of Broadstrike Dual MAGNUM onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken to aim the spray directly onto the fertilizer only and to avoid spraying the walls of the blender.

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

Calculate amounts of Broadstrike Dual MAGNUM by the following formula:

$$\frac{2,000}{\text{Pounds of fertilizer per acre}} \times \text{Pints/ acre of liquid or flowable product} = \text{Pints of liquid or flowable product per ton of fertilizer}$$

$$\frac{2,000}{\text{Pounds of fertilizer per acre}} \times \text{Pounds/acre of dry product} = \text{Pounds of dry product per ton of fertilizer}$$

#### **Pneumatic (Compressed Air) Application (Broadstrike Dual MAGNUM Alone)**

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixture to build up or plug the distributor head, delivery tubes, or nozzle deflector plates on pneumatic applicators. Research has shown that certain additives can help the herbicide flow better, improve penetration, and reduce fertilizer mixture build-up. Premix Broadstrike Dual MAGNUM with Exxon Aromatic 200® at 1 to 2 pints/gallon of formulation and spray the mixture uniformly onto the dry fertilizer. It is important that the additive be blended well with the herbicide. Optimal rates of Aromatic 200 may vary depending on fertilizer rate and type and environmental conditions. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in a fertilizer blender or through direct injection systems.

**Notes:** (1) Broadstrike Dual MAGNUM/Aromatic 200 blends should be used for impregnation onto dry fertilizer only. (2) Drying agents should not be used when using Aromatic 200 or other petroleum additives. (3) When switching impregnated herbicides, it is important to clean the blender, herbicide spray tank, and spraying apparatus thoroughly. Rinse the sides of the blender and the herbicide tank with undiluted Aromatic 200. Then, impregnate the rinsate onto a load of dry fertilizer intended for an approved crop. Use a maximum rate of 1 gallon of rinsate/ton of fertilizer. Follow with 1 to 2 loads of unimpregnated fertilizer in the blender before switching herbicides. The



fertilizer application equipment must be empty, clean, and dry before applying any material to crops other than corn.

*Precautions: To avoid potential for explosion, (1) Do not impregnate Broadstrike Dual MAGNUM or mixtures of Broadstrike Dual MAGNUM on ammonium nitrate, potassium nitrate, or sodium nitrate either alone or in blends with other fertilizers. (2) Do not use Broadstrike Dual MAGNUM or mixtures of Broadstrike Dual MAGNUM on straight limestone since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.*

**Application of Dry Bulk Fertilizer:** Apply 200 to 700 pounds of the fertilizer/herbicide 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 to prevent possible crop injury. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil may improve weed control.

*Precaution: To avoid crop injury, do not use the fertilizer/herbicide mixture on crops planted on beds.*

**Weeds Controlled by Soil Applied Broadstrike Dual MAGNUM****Grass Weeds:**

barnyardgrass  
(watergrass)  
crabgrass  
crowfootgrass  
cupgrass, prairie  
cupgrass, Southwestern  
cupgrass, woolly<sup>††</sup>  
foxtail, giant  
green  
millet  
robust  
yellow  
goosegrass  
johnsongrass (seedling)<sup>†</sup>  
millet, wild proso<sup>†</sup>  
nutsedge, yellow  
panicum, fall  
red rice  
sandbur<sup>†</sup>  
shattercane<sup>†</sup>  
signalgrass  
sorghum, volunteer<sup>†</sup>  
Witchgrass

**Broadleaf Weeds:**

anoda, spurred  
amaranth, palmer  
beggarweed, Florida<sup>††</sup>  
carpetweed  
chickweed  
cocklebur, common<sup>††</sup>  
eclipta<sup>†</sup>  
galinsoga  
goosefoot  
henbit  
horseweed (marestail)  
jimsonweed<sup>††</sup>  
kochia  
lambsquarters, common  
ladysthumb  
mallow, Venice  
mustard, wild

morningglory spp.<sup>†</sup>  
 nightshade, black  
 nightshade, cutleaf  
 nightshade, Eastern black  
 nightshade, hairy  
 pigweed, smooth  
 pigweed, redroot  
 poinsettia, wild  
 puncturevine  
 purslane, common  
 pusley, Florida  
 ragweed, common<sup>††</sup>  
 ragweed, giant<sup>†</sup>  
 shepherd's purse  
 sicklepod<sup>††</sup>  
 sida, prickly  
 smartweed, Pennsylvania  
 spurge, nodding  
 spurge, spotted  
 sunflower, wild<sup>††</sup>  
 thistle, Russian  
 velvetleaf  
 waterhemp, common  
 waterhemp, tall

<sup>†</sup>**Weeds partially controlled:** Partial control indicates significant activity, but not always at a level generally considered acceptable for commercial weed control. Control of these weeds may be improved by following the suggested procedures below.

<sup>††</sup>**Control of light to moderate infestations:** The level of control provided by Broadstrike Dual MAGNUM on common cocklebur, jimsonweed, common ragweed, Florida beggarweed, and sicklepod can vary depending on weed density and soil or environmental conditions. Control of moderate to heavy infestations of these weeds may be variable with satisfactory control of higher populations dependent on consistent soil moisture. Consistent control of these weeds may also require a tank mixture or a sequential application of a postemergence herbicide. Control may be improved by following the procedures below:

1. Thoroughly till soil prior to application to completely destroy germinating and emerged weeds.
2. Thoroughly and uniformly preplant incorporate to a depth of 2 inches utilizing two incorporation passes. Procedures 1 and 2 may be accomplished at the same time when a uniform 2-inch incorporation is achieved.
3. Apply the upper end of the rate range allowed for the soil texture and organic matter content to be treated.

- 4. Plant crop into moist soil immediately after tillage. If Broadstrike Dual MAGNUM is to be applied preemergence, apply at planting or immediately afterwards.
- 5. If available, sprinkle-irrigate within 2 days after application. Apply 1/2 to 1 inch of water, depending on soil texture.
- 6. If irrigation is not possible and rain does not occur within 7 to 10 days after planting and application, weed control may be decreased. Under these situations a uniform shallow cultivation or rotary hoeing is recommended as soon as weeds emerge.

**Note:** Triazine "resistant" weeds (triazine tolerant biotypes) on this label are controlled by Broadstrike Dual MAGNUM.

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**CORN - FIELD, SILAGE, AND SEED**

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**Do not apply this product to sweet corn or popcorn.**

**Preplant Surface Applied Treatments**

Broadstrike Dual MAGNUM may be surface applied as an early preplant treatment in minimum or no tillage systems in the states of CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, PA, RI, SD, TN, VA, VT, WI, WV, and WY. On medium and fine textured soils, early preplant treatments may be applied up to 30 days before planting. On coarse textured soils, do not apply more than 14 days before planting.

**Broadcast Application Rates:**

Soil Texture	Pts./A	
	<3% O.M.	>3% O.M.
<b>COARSE</b>	1.33 - 1.50	1.33 - 1.66
<b>MEDIUM</b>	1.50 - 1.66	1.66 - 1.85
<b>FINE</b>	1.66 - 1.85	1.66 - 1.85

**Note:** Control of common ragweed, giant ragweed, cocklebur, morningglory, jimsonweed, Florida beggarweed, and sicklepod may be enhanced by using the upper end of the rate range or by adding up to 1.5 lb a.i./A of atrazine to the mixture.

**Preplant Incorporated, Preemergence, or Spike Stage Treatments**

Broadstrike Dual MAGNUM may be applied as a preplant incorporated treatment up to 14 days before planting or a preemergence treatment during planting (behind the planter). Broadstrike Dual MAGNUM may also be applied after corn emergence (ground cracking stage) up to 2 inches in height (before the first leaf has completely unfurled) but before weed emergence. Use water only as the carrier.

**Broadcast Application Rates:**

Soil Texture	Pts./A	
	<3% O.M.	>3% O.M.
<b>COARSE</b>	1.2 - 1.33	1.2 - 1.33
<b>MEDIUM</b>	1.33 - 1.50	1.50 - 1.66
<b>FINE</b>	1.50 - 1.66	1.50 - 1.66

**Note:** Control of common ragweed, giant ragweed, cocklebur, morningglory, jimsonweed, Florida beggarweed, and sicklepod may be enhanced by using the upper end of the rate range or by adding up to 1.5 lbs. a.i./acre of atrazine to the mixture.

**CORN (FIELD, SILAGE, AND SEED) - TANK MIXES**

This product may be applied in tank mix combination with other products registered on this crop for the intended method and timing of application unless specifically prohibited by the label of the desired tank mix partner. When tank mixing with a companion herbicide, read and follow each manufacturer's label for weeds controlled, applicable use directions, precautions, and limitations before use.

**1. Broadstrike Dual MAGNUM plus AAtrex**

Broadstrike Dual MAGNUM may be applied in tank mix combination with 1.5 to 3 pts./A of AAtrex 4L or equivalent rates of AAtrex Nine-O to improve the control of cocklebur, morningglory, ragweeds, jimsonweed, Florida beggarweed, and sicklepod.

Soil Texture	AAtrex 4L (Pts./A)	AAtrex Nine-O (Lbs./A)
<b>COARSE</b>	1.5	0.83
<b>MEDIUM</b>	2.0	1.1
<b>FINE</b>	2.5 - 3.0	1.4 - 1.7

**Note:** Follow rate restrictions on the label for AAtrex if more restrictive than this label. If AAtrex is applied at rates lower than those recommended on this label, broadleaf weed control may be reduced.

**2. Broadstrike Dual MAGNUM plus Gramoxone Extra, Roundup, Roundup Ultra or Touchdown for Minimum-Tillage or No-Tillage Systems**

In a minimum-tillage or no-tillage situation where corn is planted directly into a cover crop, stale seedbed, or previous crop residues, the contact herbicides Gramoxone Extra, Roundup, Roundup Ultra or Touchdown may be tank mixed with Broadstrike Dual MAGNUM. Apply in 20 to 60 gallons of water or fluid fertilizer per acre with ground equipment.

**Application timing:** Apply before, during (behind the planter), or after planting, but before the crop emerges.

**Gramoxone Extra:** Use a nonionic surfactant at a rate of 1 or 2 pts./100 gals. in tank mixes with Gramoxone Extra. Use the 1 pt./100 gals. rate for surfactant products with 75% or greater nonionic active ingredient and the 2 pts./100 gals. rate for products containing 50% to 74% nonionic active ingredient. This treatment will not control weeds more than 6 inches tall. See the label for Gramoxone Extra for weeds controlled and recommended rates for specific weeds. Do not apply combinations containing Gramoxone Extra in suspension type fertilizers as the activity of the active ingredient, paraquat, will be reduced.

**Roundup or Roundup Ultra:** See the label for weeds controlled and recommended rates for specific weeds.

**Touchdown:** See the label for weeds controlled and recommended rates for specific weeds.

3. **Broadstrike Dual MAGNUM plus 2,4-D for Minimum-Tillage or No-Tillage Systems**

Where heavy crop residues exist, add labeled rates of 2,4-D amine or ester to the spray tank and apply in a minimum of 20 gals. of carrier/A.

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 a nonionic surfactant at 1 to 2 qts./100 gals. diluted spray. Apply before weeds exceed 3 inches high. When tank mixing with 2,4-D, read and follow the manufacturer's label for applicable use directions, application timing, precautions, and limitations before use. **This tank mixture will not control emerged grasses.**

4. **Broadstrike Dual MAGNUM Plus Princep® (4L or Caliber 90®)**

For enhanced preemergence control of heavy infestations of crabgrass or fall panicum in the central and northeastern U.S. (including the states of MI, IN, KY, IL, MO, OH, PA, NY, VT, NH, ME, MA, RI, CT, NJ, DE, MD, and VA), add up to 1 qt. of Princep 4L herbicide (or 1.1 lbs. Caliber 90 herbicide) per acre to the recommended rate of Broadstrike Dual MAGNUM.

5. **Broadstrike Dual MAGNUM plus Dual MAGNUM or Dual II MAGNUM**

For preplant surface, preplant incorporated, or preemergence application where severe grass populations are expected on medium or fine textured soils with relatively high organic matter content, Broadstrike Dual MAGNUM may be tank mixed with additional Dual MAGNUM, or Dual II MAGNUM for optimum

performance. The total application rate of Broadstrike Dual MAGNUM plus Dual MAGNUM or Broadstrike Dual MAGNUM plus Dual II MAGNUM (pts./A of each added together) cannot exceed the maximum application rate (pts./A) for Dual MAGNUM or Dual II MAGNUM specified in their respective labels for corn combinations. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

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**CORN - BROADSTRIKE DUAL MAGNUM FOLLOWED BY POSTEMERGENCE TREATMENTS**

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Broadleaf weeds not controlled by Broadstrike Dual MAGNUM may be treated using postemergence herbicide products such as AAtrex, Banvel®, 2,4-D, Marksman®, Buctril®, Exceed, Spirit, NorthStar, Beacon or other labeled products. Annual grasses such as foxtail not controlled by Broadstrike Dual MAGNUM may be treated with Accent® or atrazine. Grass weeds such as shattercane, quackgrass, or rhizome johnsongrass not controlled by Broadstrike Dual MAGNUM may be treated with Beacon or Accent herbicide. Read and follow each manufacturer's label for weeds controlled, applicable use directions, precautions, and limitations before use.

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**SOYBEANS**

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**Preplant Surface Applied Treatments**

Broadstrike Dual MAGNUM may be surface applied as an early preplant treatment in minimum or no tillage systems in the states of CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NY, OH, PA, RI, SD, TN, VA, VT, WI, WV, and WY. On medium and fine textured soils, early preplant treatments may be applied up to 30 days before planting. On coarse textured soils, do not apply more than 14 days before planting.

**Broadcast Application Rates:**

Soil Texture	Pts./A	
	<3% O.M.	>3% O.M.
<b>COARSE</b>	1.33 - 1.5	1.33 - 1.66
<b>MEDIUM</b>	1.50 - 1.66	1.66 - 1.85
<b>FINE</b>	1.66 - 1.85	1.66 - 1.85

**Note:** Control of common ragweed, giant ragweed, cocklebur, morningglory, jimsonweed, Florida beggarweed, and sicklepod may be enhanced by using the higher end of the rate range for each soil textural class.

**Preplant Incorporated or Preemergence Treatments**

Broadstrike Dual MAGNUM may be applied preplant incorporated within 14 days before planting.

Broadstrike Dual MAGNUM may be applied as a preemergence treatment during planting (behind the planter) or after planting, but before weeds or crop emerge.

**Broadcast Application Rates**

Soil Texture	Pts./A	
	<3% O.M.	>3% O.M.
<b>COARSE</b>	1.2 - 1.33	1.2 - 1.33
<b>MEDIUM</b>	1.33 - 1.5	1.50 - 1.66
<b>FINE</b>	1.50 - 1.66	1.50 - 1.66

**Note:** Control of common ragweed, giant ragweed, cocklebur, morningglory, jimsonweed, Florida beggarweed, and sicklepod may be enhanced by using the higher end of the rate range for each soil textural class.

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**SOYBEANS - TANK MIXES**

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**This product may be applied in tank mix combination with other products registered on this crop for the intended method and timing of application unless specifically prohibited by the label of the desired tank mix partner. When tank mixing with a companion herbicide, read and follow each manufacturer's label for weeds controlled, applicable use directions, precautions, and limitations before use.**



1. **Broadstrike Dual MAGNUM plus Lorox®, Sencor®, or Lexone®**

Broadstrike Dual MAGNUM may be tank mixed with either Lorox, Sencor, or Lexone herbicides and applied to control additional weeds in soybeans. Read and follow the manufacturer's label for applicable use directions, application timing, precautions, and limitations.

2. **Broadstrike Dual MAGNUM plus Gramoxone Extra, Roundup, Roundup Ultra or Touchdown for Minimum Tillage or No-Tillage Systems.**

In minimum-tillage or no-tillage systems where soybeans are planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, the contact herbicides Gramoxone Extra, Roundup, Roundup Ultra, or Touchdown should be used in tank mix combination with Broadstrike Dual MAGNUM. Apply in 20 to 60 gals. of water or fluid fertilizer per acre with ground equipment.

**Application timing:** Apply before, during (behind the planter), or after planting, but before the crop emerges.

**Gramoxone Extra:** Use a nonionic surfactant at a rate of 1 or 2 pts./100 gals. in tank mixes with Gramoxone Extra. Use the 1 pt./100 gal. rate for surfactant products with 75% or greater nonionic active ingredient and the 2 pts./100 gals. rate for products containing 50% to 74% nonionic active ingredient. This treatment will control weeds from 1 to 6 inches tall. See the label for Gramoxone Extra for weeds controlled, recommended rates for specific weeds, and application instructions. Do not apply combinations containing Gramoxone Extra in suspension type fertilizers as the activity of the active ingredient paraquat will be reduced.

**Roundup or Roundup Ultra:** See the label for weeds controlled and recommended rates for specific weeds.

**Touchdown:** See the label for weeds controlled and recommended rates for specific weeds.

3. **Broadstrike Dual MAGNUM plus 2,4-D for Minimum-Tillage or No-Tillage Systems**

For burndown control of susceptible annual and perennial broadleaf weeds prior to planting soybeans in reduced tillage systems, Broadstrike Dual MAGNUM may be applied in tank mix combination with an appropriately labeled 2,4-D product. Apply in a minimum of 20 gals. of carrier/A. This use requires that planting of soybeans be delayed a minimum of 15 to 30 days following application to avoid potential crop injury from 2,4-D residues in soil. Follow the

recommended rates, specific planting delays, and other use precautions and limitations on the label of the 2,4-D product used.

As carriers, nitrogen solutions and complete liquid fertilizers applied before crop emergence enhance burndown of existing weeds and, therefore, are recommended instead of water. Add a nonionic surfactant at 1 to 2 qts./100 gals. diluted spray. Apply before weeds exceed 3 inches high. When tank mixing with 2,4-D, read and follow the manufacturer's label for applicable use directions, application timing, precautions, and limitations before use. This tank mixture will not control emerged grasses.

#### 4. **Broadstrike Dual MAGNUM plus Dual MAGNUM or Dual II MAGNUM**

For preplant surface, preplant incorporated, or preemergence applications where severe grass populations are expected on medium or fine textured soils with relatively high organic matter content, Broadstrike Dual MAGNUM may be tank mixed with additional Dual MAGNUM or Dual II MAGNUM for optimum performance. The total application rate of Broadstrike Dual MAGNUM plus Dual MAGNUM or Broadstrike Dual MAGNUM plus Dual II MAGNUM (pts./A of each added together) cannot exceed the maximum application rate (pts./A) for Dual MAGNUM or Dual II MAGNUM specified in their respective labels for soybean combinations. Refer to the respective labels and follow all directions, limitations, and restrictions for each product.

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### **SOYBEANS - BROADSTRIKE DUAL MAGNUM FOUNDATION PROGRAM FOR PLANNED 2-PASS WEED CONTROL SYSTEMS**

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Broadstrike Dual MAGNUM may be applied preplant incorporated or preemergence at 1.5 pts./A on all soils to reduce competition from the weeds listed on this label prior to a planned postemergence weed control treatment. Recommended postemergence treatments include any product or combination of products labeled to control the specific weeds remaining in the field including Roundup Original and Roundup Ultra (for use on Roundup Ready® soybean varieties). Follow all application directions on this label for product use alone, preplant incorporated or preemergence. For the postemergence herbicide application, consult the manufacturer's label for weeds controlled, weed size, application rate, additional use directions, precautions and limitations before use.

#### **Storage and Disposal**

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

**Storage:** Do not store below minus 30°F. Store in original container only. Do not store near heat or flame. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site according to label directions or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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.

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## PRECAUTIONARY STATEMENTS

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### Hazards to Humans and Domestic Animals

#### WARNING/AVISO

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin.

#### Statement of Practical Treatment

**If in eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

**If swallowed:** Call a physician or Poison control Center. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

**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
- Chemical-resistant gloves, such as nitril, butyl, neoprene and/or barrier laminate
- Shoes plus socks
- Protective eyewear (goggles or face shield)

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.

### **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.

### **Ground Water Advisory**

Broadstrike Dual MAGNUM contains the active ingredients S-metolachlor and flumetsulam. 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, they 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 and/or irrigation equipment.

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 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.

AAtrex®, Beacon®, Caliber 90®, Dual MAGNUM®, Dual II MAGNUM®, Exceed®, Nine-O®, NorthStar™, 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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Ag-Chem RoGator® trademark of Ag-Chem Equipment Company

Agsorb® trademark of Oil-Dri Corporation

Broadstrike\* trademark of Dow AgroSciences

Banvel®, Basagran®, Marksman®, and Storm® trademarks of BASF Corporation

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Landmaster®, Roundup®, Roundup Ready®, and Screen® trademarks of Monsanto Company

Prowl®, Pursuit®, and Scepter® trademarks of American Cyanamid Company

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Tyler Patriot™ trademark of Tyler Ltd. Partnership

Unite® trademark of HACO, Inc.

Willmar Air Ride® trademark of Willmar Manufacturing

X-77® trademark of Loveland Industries, Inc.

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Greensboro, North Carolina 27419

NCP

[LABELB-W/BROADSTRIKE DUAL] - CCG - 4/26/99

(Base Label)

Broadstrike Dual MAGNUM™

HERBICIDE

A selective herbicide for the control of annual grass and broadleaf weeds in field corn and soybeans.

Active Ingredients

Flumetsulam: (CAS No. 98967-40-9) .....	3.2%
S-metolachlor (CAS No. 87392-12-9) .....	78.2%
<u>Other ingredients</u>	<u>18.6%</u>
Total	100.0%

Contains 0.30 pounds of flumetsulam and 7.3 pounds of S-metolachlor per gallon.

See directions for use in attached booklet.

**AGRICULTURAL USE REQUIREMENTS**

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

EPA Reg. No. 100-947

EPA Est. 070989-MO-001

2.5 GALLONS

U.S. Standard Measure

**KEEP OUT OF REACH OF CHILDREN**

**WARNING/AVISO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

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**PRECAUTIONARY STATEMENTS**

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**Hazards to Humans and Domestic Animals**

Causes substantial but temporary eye irritation. Do not get in eyes. Wear goggles or face shield. Harmful if swallowed or absorbed through skin. Avoid contact with skin or clothing.

**Statement of Practical Treatment**

**If in eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

**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, or, if available, by administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention if irritation persists.

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

**Ground Water Advisory**

Broadstrike Dual MAGNUM contains the active ingredients S-metolachlor and flumetsulam. 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, they 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 and/or irrigation equipment.

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 mixed/loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes\*.

\*For exceptions to this restriction, see the **Environmental Hazards** section of the **Precautionary Statements** in attached booklet.

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

**Container Disposal**

Do not reuse empty container. Triple rinse (or equivalent), 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.

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**Shake Well Before Using.**

Broadstrike Dual MAGNUM trademark of Novartis  
U.S. Patent No. 5,002,606

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Greensboro, North Carolina 27419

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