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

GROUP 15 HERBICIDE

Dual II G Magnum®

syngenta®

Granular Herbicide

For weed control in corn (all types), peanuts, potatoes, and soybeans

Active Ingredient:	
S-metolachlor (CAS No. 87392-12-9)	16.0%
Other Ingredients:	84.0%
Total:	100.0%

Dual IIG Magnum is a granular herbicide containing 16 lb active ingredient per 100 lb.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use in booklet.

Product of Switzerland Formulated in USA

EPA Reg. No. 100-910

SCP 910A-L2H 0714
4046351

™

FIRST AID	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with eyes, skin, or clothing. This product may cause skin sensitization reactions in some people.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

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

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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.

continued...

PRECAUTIONARY STATEMENTS *(continued)*

Environmental Hazards

Cover or incorporate granules that are spilled during loading or are visible on soil surface in turn areas. 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.

Ground Water Advisory

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

Surface Water Advisory

The active ingredient in Dual IIG Magnum has the potential to contaminate surface water through ground spray. Under some conditions, the active ingredient 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 spills or improper disposal of excess pesticide granules.

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.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitations of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

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

Dual IIG Magnum should be used only in accordance with specifications on this label or in EPA Accepted supplemental labeling recommendations for this product.

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

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

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

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PRODUCT INFORMATION

Dual IIG Magnum will control many annual grasses and certain broadleaf weeds in corn (all types), peanuts, potatoes, and soybeans. It should be applied prior to the emergence of weeds. It may be preplant surface-applied (corn and soybeans only), or incorporated into the surface 1-2 inches of soil before planting, or left on the soil surface during or after planting. Dry weather following an application of Dual IIG Magnum may reduce its effectiveness. Shallow cultivate if weeds develop or if tillage is necessary to improve the physical condition of the soil.

Precaution: Injury may occur to crops other than corn following the use of Dual IIG Magnum under abnormally high soil moisture conditions during early development of the crop. To avoid reduced weed control or crop injury, do not apply to frozen ground or perform any operation that will unevenly distribute Dual IIG Magnum in the soil. In reduced tillage systems, injury may occur from movement of Dual IIG Magnum into the planter slit if the slit is not properly closed after planting.

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

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

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

Resistant Weed Management

Dual IIG Magnum herbicide contains the active ingredient *S*-metolachlor which inhibits the formation of very long chain fatty acids (VLCFA, Site of Action Group 15). Some naturally occurring weed populations have been identified as resistant to Group 15 herbicides. Selection of resistant biotypes, through repeated use of these herbicides or lower than recommended use rates in the same field, may result in weed control failures. A resistant biotype may be present where poor performance cannot be attributed to adverse environmental conditions or improper application methods. If resistance is suspected, contact your local Syngenta representative and/or agricultural advisor for assistance.

General principles of herbicide resistant weed management:

- Employ integrated weed management practices. Use multiple herbicide sites-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.
- Use the full recommended herbicide rate and proper application timing for the hardest to control weed species present in the field.
- Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.
- Monitor site and clean equipment between sites.
- Start with a clean field and control weeds early by using a burndown treatment or tillage in combination with a preemergence residual herbicide as appropriate.
- Use cultural practices such as cultivation and crop rotation, where appropriate.
- Use good agronomic principles that enhance crop competitiveness.

Soil Textures and Herbicide Rates

Where rates on this label 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	Sandy clay loam
Loamy sand	Silt loam	Silty clay loam
Sandy loam	Silt	Clay loam
		Sandy clay
		Silty clay
		Clay

Within rate ranges in the rate of application tables and elsewhere on this label, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter.

Application of other products referenced in this label is permitted only in those states where the referenced product is registered.

Weeds Controlled

barnyardgrass (watergrass)	galinsoga	signalgrass (*Brachiaria*)
carpetweed	giant foxtail	southwestern cupgrass
common waterhemp	goosegrass	tall waterhemp
crabgrass	green foxtail	wild proso millet*
crowfootgrass	pigweed	witchgrass
Eastern black nightshade	prairie cupgrass	woolly cupgrass*
fall panicum	red rice	yellow foxtail
Florida pusley	robust foxtails (purple, white)	yellow nutsedge
foxtail millet		

*For control of these weeds in corn only, refer to the **Corn-Woolly Cupgrass and Wild Proso Millet Control Program** section of this label.

Weeds Partially Controlled*: common purslane, eclipta, Florida beggarweed**, hairy nightshade, sandbur, seedling johnsongrass, shattercane, volunteer sorghum, wild proso millet, and woolly cupgrass.

*Control of these weeds can be erratic due partially to variable weather conditions. Control may be improved by following these suggested procedures:

1. **Thoroughly till moist soil** to destroy germinating and emerged weeds. If Dual IIG Magnum is to be applied preplant incorporated, this tillage may be used to incorporate Dual IIG Magnum if uniform 2-inch incorporation is achieved as recommended under **Application Procedures**.
2. Plant crop into moist soil **immediately after tillage**. If Dual IIG Magnum is to be used preemergence, apply at planting or immediately after planting, but before weed and/or crop emergence.
3. If available, **sprinkler irrigate** within 2 days after application so that a total of 1/2 inch of water (overhead sprinkler + rainfall) is available on coarse-textured soils and 3/4-1 inch is available on medium- and fine-textured soils.
4. If irrigation is not possible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these conditions, a uniform, shallow cultivation is recommended as soon as weeds emerge.

**For partial control of this weed, use a minimum of 8 lbs./A and apply preemergence.

APPLICATION PROCEDURES

Application Timing

Preplant Surface-Applied: For minimum-tillage or no-tillage systems only. Dual IIG Magnum alone may be applied up to 45 days before planting certain crops. Use only split applications for treatments made 30-45 days before planting, with $^{2}/_{3}$ of the recommended broadcast rate for the crop and soil texture applied initially and the remaining $^{1}/_{3}$ at planting. Treatments less than 30 days before planting may be made as either a split or a single application. If weeds are present at the time of treatment, apply a labeled contact herbicide (for example, Gramoxone Inteon® or Roundup®). 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 may be diminished.

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

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

Fall Application (Only in IA, MN, ND, SD, WI, and portions of NE and IL – See specific instructions in the Corn and Soybean sections of this label for timing of application and other information): Do not apply to frozen ground. Use on medium- and fine-textured soils with greater than 2.5% organic matter that will be planted to corn or soybeans the next spring. Ground may be tilled before or after application. Do not exceed a 2-inch incorporation depth if tilled after treatment. **Note:** If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate for the specific crop, or illegal residues may result.

Application Procedures

Dual IIG Magnum may be applied either broadcast or banded. Do not apply Dual IIG Magnum during periods of high winds which could disrupt placement of the granules and reduce weed control. Locate granular diffusers as close to the ground as possible. Windshield attachments are advisable.

Pneumatic (Compressed Air) Broadcast Application (Dual IIG Magnum Alone): Dual IIG Magnum may be applied through pneumatic dry fertilizer applicators which are equipped with special on-board herbicide metering bins. These metering units must be properly calibrated with Dual IIG Magnum prior to use. The placement of the granules in the applicator's distribution system should be designed to minimize segregation of the granules from the dry fertilizer materials.

Restriction: Dual IIG Magnum must never be blended with other pesticide formulations for application through on-board metering bins. Dual IIG Magnum must never be blender-mixed with liquid or dry fertilizer materials for broadcast pneumatic application.

Broadcast Application ("Cyclone" or "Spinner" Type Spreaders): Dual IIG Magnum may be applied with a broadcast type (spinner) granular applicator or with a cyclone type spreader. Use applicators and techniques that will apply the granules uniformly to the soil. Do not blend Dual IIG Magnum with other pesticides or fertilizers. Always calibrate the device with Dual IIG Magnum prior to use.

Variable-Rate Broadcast Ground Application for Corn and Soybeans: Variable-rate technologies may be used for more precise applications. Two additive factors have been determined for use in applications using variable-rate technologies. One of these factors (A) is directly related to soil texture and the other (B) is related to percent organic matter (OM) and soil texture. When these two factors are added together, the resulting application rate will be more precise for a soil of a given soil texture and organic matter content. Use the formulas below to assure a more precise rate for any given area within a field.

Formulas* for Preplant Surface-Applied, Preplant Incorporated, Preemergence, and Early Preplant Applications

Refer to specific instructions regarding these applications in the **Application Procedures** section of this label, as well as the appropriate crop section.

	Rates in Pounds Per Acre					
	Preplant Surface-Applied Preplant Incorporated Preemergence			Early Preplant		
	Factors			Factors		
Soil Texture	**A**		**B**	**A**		**B**
COARSE	6.0	+	(0.6 x % OM)	7.2	+	(0.60 x % OM)
MEDIUM	7.0	+	(0.6 x % OM)	8.4	+	(0.50 x % OM)
FINE	8.0	+	(0.6 x % OM)	10.0	+	(0.40 x % OM)

*****Do not use on soils with greater than 8% organic matter (OM).

Formulas* for Fall Applications

This product is registered for fall use only where corn or soybeans will be grown the following year in IA, MN, SD, ND, WI, and portions of NE and IL. Refer to specific instructions and restrictions regarding fall applications in the **Corn** and **Soybeans** sections of this label.

	Rates in Pounds Per Acre		
	Fall Applications		
	Factors		
Soil Texture	**A**		**B**
COARSE	DO NOT USE		
MEDIUM	8.4	+	(0.68 x % OM)
FINE	10.8	+	(0.4 x % OM)

*****Do not use on soils with greater than 8% organic matter (OM).

Band Treatment: Dual IIG Magnum may be applied with any standard granular applicator capable of uniformly distributing a predetermined amount of granules to a desired area. Band treatment made at seeding should only be applied behind the press wheel.

Note: Caution should be taken with planting equipment so that any track (soil depression) made by the planter press wheel is minimal. This will reduce concentration of granules in the press wheel track by heavy rain which can result in crop injury. Soil tillage should not follow the use of band applications, unless it is adapted so as not to displace the band and hence, reduce weed control in the band. In reduced tillage systems, injury may occur if the planter slit is not properly closed during planting.

Applicator settings are given for band applications in Chart 1. These settings were determined under laboratory conditions to +5% accuracy. Note that the settings may differ depending on speed of application, as well as rate per acre. **It is important that the user calibrate each individual granular applicator before its use. Since the actual setting for each individual granular applicator may vary, the settings shown should serve only as guidelines for calibration**.

Calculate the amount of Dual IIG Magnum needed for band treatment as follows:

$$\frac{\text{Band width in inches}}{\text{Row spacing in inches}} \times \text{Broadcast rate per acre} = \text{Band rate per acre}$$

Example: If 15 lbs./A is recommended for broadcast application and you wish to treat a band 14 inches wide in crop rows spaced 30 inches apart:

14/30 X 15 = 7.0 lbs. of granules needed for each acre that is to be treated

Chart 1: Suggested Applicator Settings*

		Rate for 14" Band Width Per 1,000 Linear Ft.				
		2.6 oz.	3.4 oz.	4.3 oz.	5.1 oz.	6.4 oz.
		Equivalent Broadcast Rate Per Acre				
Applicator	**Speed MPH**	**6 lbs.**	**8 lbs.**	**10 lbs.**	**12 lbs.**	**15 lbs.**
Gandy (Two Openings for 14" Band)	4 5 6	11.5 12.8 14.1	13.2 14.7 16.2	14.8 16.7 18.6	16.2 18.4 20.4	18.5 20.7 22.7
John Deere 7000 and 7100 Max-Emerge® Meter Scale 0..10..20.. etc.	4 5 6	11 13 16	14 17 20	17 21 24	20 24 27	24 28 31
John Deere 7000 and 7100 Max-Emerge Meter Scale 0..15..25..etc.	4 5 6	9 10 12	11 12 14	12 15 17	14 17 19	17 20 22
John Deere 7200 and 7300 Max-Emerge 2 White 6100 Series	4 5 6	14 16 19	17 21 25	21 26 32	25 31 37	32 40 46
Kinze®	4 5 6	6 9 11	9 12 14	12 15 18	14 18 21	18 21 24
Buffalo®	4 5 6	7 9 11	9 11 15	12 16 19	15 19 21	19 22 25
Noble (Remcor) 1973-Present White 5100 Series Deutz Allis 1985-Present (Rectangular Hole in Bottom)	4 5 6	7 8 9	8 9 11	9 11 13	11 13 15	13 15 18
International Harvester 1981-1985** Case IH 1985-Present**	4 5 6	1/83 2/10 2/22	2/05 2/32 2/57	2/34 2/67 3/03	2/57 2/98 3/50	3/01 3/58 4/10
Allis Chalmers 1979-1985 (Deutz-Allis) International Harvester 1980 & Before	4 5 6	8 10 12	10 13 15	13 16 18	15 18 20	18 21 24

*Settings are for application of the equivalent broadcast rates per acre indicated in a 14-inch band at speed (miles per hour) shown. If other than a 14-inch band is to be used, these settings do not apply and additional calibration will be necessary.

**Example 1/83 - Gate 1: 1/3 way to 9th setting.

Calibration of Band Applicators

To calibrate a granular applicator for a standard 14-inch band, a sample has to be collected while the applicator is either running or simulating a run over a distance of 500 ft.

Procedure

1. Fill applicator box with Dual IIG Magnum.
2. Refer to Chart 1 and adjust the setting on your applicator to correspond to the desired rate per acre.
3. Attach a plastic bag or similar container to the applicator spout after detaching the delivery tube.
4. Make the 500-ft. run at planting speed.

   Speed/Time required to cover 500 ft.:

   4 mph = 1 min. 25 sec.
   5 mph = 1 min. 8 sec.
   6 mph = 57 sec.
5. Weigh granules collected (or measure volume) and, if necessary, adjust and make successive runs until the setting delivers the correct number of oz. per 500 ft. of row, as shown in Chart 2.
6. Repeat this procedure for each granular applicator box.

Chart 2: The Equivalent Broadcast Rate per Acre in Volume and Weight for 500 Ft. on the Basis of a 14-Inch Band

Broadcast Rate Per Acre	Volume Collected In 14-Inch Band 500 Linear Ft.	Weight Collected In 14-Inch Band 500 Linear Ft.
6 lbs.	1.6 fl. oz.	1.3 oz.
8 lbs.	2.2 fl. oz.	1.7 oz.
10 lbs.	2.8 fl. oz.	2.2 oz.
12 lbs.	3.2 fl. oz.	2.6 oz.
15 lbs.	4.5 fl. oz.	3.5 oz.

For band widths other than 14 inches, the calibration distance will differ from 500 ft.

For other band widths, calculate the relative calibration distance in which to collect the corresponding weight or volume of Dual IIG Magnum in Chart 2 as follows:

$$\frac{\text{14 (Inches)}}{\text{Desired Band Width (Inches)}} \times 500 = \text{Calibration distance in ft.}$$

Example: A band width of 10 inches is to be used, instead of 14 inches, to apply Dual IIG Magnum at an equivalent rate of 10 lbs. per broadcast acre.

A. $\frac{\text{14 Inches}}{\text{10 Inches X 500 ft. = 700 ft.}}$

B. Collect 2.8 fl. oz. by volume or 2.15 oz. by weight for the newly calculated calibration distance of 700 ft. for a 10-inch band.

CORN (ALL TYPES)

For control of annual grasses and broadleaf weeds listed under the **Product Information** section, apply Dual IIG Magnum either preplant surface, preplant incorporated, or preemergence to corn before weeds emerge. For extended control of annual weeds, Dual IIG Magnum may be applied to weed-free soil at the time of the last cultivation (lay-by application) as either a surface or shallow incorporated treatment. Follow instructions for use of Dual IIG Magnum under **Application Timing**.

Preplant Surface-Applied

A. Fall Application:

1. Apply after September 30 in ND, SD, MN, WI, and north of Route 30 in IA.
2. Apply after October 15 north of Route 91 in NE and south of Route 30 in IA.
3. Apply after October 31 north of Route 136 in IL.

In all locations, apply to crop stubble after harvest when the sustained soil temperature at a 4-inch depth is less than 55°F and falling. **Do not apply to frozen ground.** In minimum-till or no-tillage systems on soils having greater than 2.5% organic matter, use 10-15 lbs./A on *medium-textured soils* and 12-15 lbs./A on *fine-textured soils*. A tillage operation may precede the application. A fall and/or a spring tillage may follow application, but do not exceed an incorporation depth greater than 2 inches. Minimize furrow and ridge formation in the tillage operations. **Note:** If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate for corn, or illegal residues may result.

B. Use on medium- and fine-textured soils with minimum-tillage or no-tillage systems in CO, IA, IL, IN, KS, KY, MN, MO, MT, ND, NE, SD, TN, WI, and WY. Apply $^{2}/_{3}$ of the recommended broadcast rate of Dual IIG Magnum shown in Table 1 as a split treatment 30-45 days before planting and the remaining $^{1}/_{3}$ immediately before planting, or at planting. Applications less than 30 days before planting may be made either as a split or as a single treatment. Apply 8 lbs./A broadcast on *coarse soils* not more than 2 weeks before planting. If weeds are present at the time of treatment, apply a labeled contact herbicide (for example, Gramoxone Inteon or Roundup). Observe the 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. To avoid reduced weed control, do not apply to frozen soil as rainfall may change the distribution pattern of the Dual IIG Magnum granules. Injury may occur from movement of Dual IIG Magnum into the planter slit if the slit is not properly closed during planting.

C. On medium- and fine-textured soils with minimum- or no-tillage systems in CT, DE, MA, MD, ME, MI, NH, NY, OH, PA, RI, VA, VT, and WV, preplant surface applications may be applied following the directions for use above. If the amount of rainfall results in unsatisfactory length of weed control following the earlier treatment, a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide could be used, i.e., AAtrex®, Beacon®, Bicep Magnum®, Bicep II Magnum®, Exceed®, Accent®, Banvel®, Basagran®, bromoxynil (Brominal or Buctril®), or 2,4-D. Observe all directions for use, precautions, and limitations on the label of the postemergence herbicide.

Preplant Incorporated: Using the appropriate rate from Table 1, broadcast Dual IIG Magnum to the soil and uniformly incorporate within the top 1-2 inches of soil within 14 days before planting, using appropriate surface incorporating equipment, such as a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform incorporation.

Preemergence: Band or broadcast Dual IIG Magnum to the soil surface during or after planting and before weeds emerge, using the appropriate rate from Table 1. For band treatment, apply granules behind the press wheel. In reduced tillage systems, injury may occur from movement of Dual IIG Magnum into the planter slit if the slit is not properly closed during planting.

Restriction for All Applications to Corn: To avoid possible illegal residues, (1) do not graze or feed forage from treated areas for 30 days following application and (2) do not harvest sweet corn ears from treated areas for 30 days following application.

Table 1: Dual IIG Magnum – Corn* – Preplant Surface (Excluding Fall Application), Preplant Incorporated, or Preemergence Applications

	Broadcast Rate Per Acre	
Soil Texture	**Less Than 3% Organic Matter**	**3-6%** Organic Matter**
COARSE Sand, loamy sand, sandy loam	6-8 lbs.	8 lbs.
MEDIUM Loam, silt loam, silt	8-10 lbs.	8-10 lbs.
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	8-10 lbs.	10-12 lbs.
Muck or peat soils	DO NOT USE	

*Dual IIG Magnum may be used sequentially in place of Dual Magnum or Dual II Magnum formulations with AAtrex, AAtrex + Lorox®, AAtrex or Princep® + Prowl®, or Banvel applied at the tank mix rate specified on the respective product labels.

**Dual IIG Magnum may be used up to 15 lbs./A (broadcast basis) on soils having an organic matter content between 6 and 20%. Dual IIG Magnum may be used up to 12 lbs./A on any soil for extended residual control and where severe stands of problem weeds are expected.

Woolly Cupgrass and Wild Proso Millet Control Program in Corn: For control of these species, use the following 3-step program: (1) Apply Dual IIG Magnum early preplant, preplant incorporated, or preemergence at 10 lbs./A on *medium-textured soils* and 12 lbs./A on *fine-textured soils*. Lightly incorporate with a rotary hoe if rainfall does not occur within 5-7 days; (2) Apply a postemergence tank mix of Beacon at 0.38 oz./A or Exceed at 1 packet per 4 acres plus Accent SP at 0.33 oz./A plus 1 qt. of crop oil concentrate plus 1 gal./A of 28% nitrogen, or the equivalent amount of ammonium sulfate, when grasses are 2-3 inches tall and the corn is at least 4 inches tall; and (3) Cultivate 14-21 days after the postemergence application.

Restrictions and Precautions: (1) In the event of escape of annual weeds following a preplant surface, preplant incorporated, or preemergence treatment of Dual IIG Magnum, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., AAtrex, Beacon, Bicep Magnum, Bicep II Magnum, Exceed, Accent, Banvel, Basagran, Brominal, Buctril, or 2,4-D. (2) Do not apply more than the equivalent of 15 lbs. of Dual IIG Magnum per acre during any one year, or illegal residues may result. This includes both Dual IIG Magnum and Dual Magnum or Dual II Magnum formulations (1 pt. of these Dual Magnum formulations is equivalent to 6 lbs. of Dual IIG Magnum).

PEANUTS

Dual IIG Magnum Single Applications – All Peanut-Growing Areas

Apply Dual IIG Magnum either preplant incorporated, postplant incorporated, or preemergence, using the appropriate rate specified below. **Preplant Incorporated or Preemergence:** Follow instructions for use of Dual IIG Magnum above under **Application Timing**. **Postplant Incorporated:** Broadcast or band Dual IIG Magnum to the soil surface and shallowly incorporate into the soil after planting, but before peanut germination. Incorporation depth and incorporating implements must be kept above the seed or seed will be damaged.

Apply Dual IIG Magnum preplant incorporated, postplant incorporated, or preemergence at a broadcast rate of 6-8 lbs./A in the Southeast* or 5-8 lbs./A in NM, OK, and TX.

*In the Southeast, 8-12 lbs./A may be applied preemergence for partial control of Florida beggarweed.

Notes: (1) Dual IIG Magnum may be applied via label directions after any of the following preplant incorporated herbicides when used according to label recommendations: Balan® at 3-4 qts./A; Treflan® at 1 pt./A. (2) Pursuit® may be applied sequentially after Dual IIG Magnum. Refer to the Pursuit label for use directions and use in accordance with the more restrictive label.

SOYBEANS

For control of annual grasses and broadleaf weeds listed under the **Product Information** section, apply Dual IIG Magnum either preplant surface, preplant incorporated, or preemergence to soybeans before weeds emerge. Follow instructions for use of Dual IIG Magnum under **Application Timing**.

Preplant Surface-Applied

A. Fall Application:

1. Apply after September 30 in ND, SD, MN, WI, and north of Route 30 in IA.
2. Apply after October 15 north of Route 91 in NE and south of Route 30 in IA.
3. Apply after October 31 north of Route 136 in IL.

In all locations, apply to crop stubble after harvest when the sustained soil temperature at a 4-inch depth is less than 55°F and falling. **Do not apply to frozen ground.** In minimum-till or no-tillage systems on soils having greater than 2.5% organic matter, use 10-15 lbs./A on *medium-textured soils* and 12-15 lbs./A on *fine-textured soils*. A tillage operation may precede the application. A fall and/or a spring tillage may follow application, but do not exceed an incorporation depth greater than 2 inches. Minimize furrow and ridge formation in the tillage operations. **Note:** If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate for soybeans, or illegal residues may result.

B. Use on medium- and fine-textured soils with minimum-tillage or no-tillage systems in CO, CT, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NY, OH, PA, RI, SD, TN, VA, VT, WI, WV, and WY. Apply $^{2}/_{3}$ of the recommended rate of Dual IIG Magnum from Table 2 as a split treatment 30-45 days prior to planting and the remainder at planting. Applications made less than 30 days before planting may be as either a split or a single treatment. Apply 8 lbs./A broadcast on *coarse soils* not more than 2 weeks prior to planting. If weeds are present at the time of treatment, apply a labeled contact herbicide (for example, Gramoxone Inteon or Roundup). Observe the 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. To avoid reduced weed control, do not apply to frozen soil as rainfall may change the distribution pattern of the Dual IIG Magnum granules. Injury may occur from movement of Dual IIG Magnum into the planter slit if the slit is not properly closed during planting.

Preplant Incorporated: Using the appropriate rate from Table 2, broadcast Dual IIG Magnum to the soil surface and incorporate in the top 2 inches of soil within 14 days before planting, using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform incorporation.

Preemergence: Band or broadcast Dual IIG Magnum to the soil surface during or after planting and before weeds emerge, using the appropriate rate from Table 2. For band treatment, apply granules behind the press wheel. In reduced-tillage systems, injury may occur from movement of Dual IIG Magnum into the planter slit if the slit is not properly closed during planting.

Table 2: Dual IIG Magnum – Soybeans* – Preplant Surface (Excluding Fall Application), Preplant Incorporated, or Preemergence Applications

	Broadcast Rate Per Acre	
Soil Texture	**Less Than 3% Organic Matter**	**3-6%** Organic Matter**
COARSE Sand, loamy sand, sandy loam	6-8 lbs.	8 lbs.
MEDIUM Loam, silt loam, silt	8-10 lbs.	8-10 lbs.
FINE Sandy clay loam, silty clay loam, clay loam, sandy clay, silty clay, clay	8-10 lbs.	10-12 lbs.
Muck or peat soils	DO NOT USE	

***Dual IIG Magnum may be used sequentially in place of Dual Magnum or Dual II Magnum formulations with Sencor®/Lexone, Lorox, Treflan, Scepter®, Lorox Plus, Gemini, Canopy®, Preview, Command®, Sonalan, or Pursuit applied at the tank mix rate specified on the respective product labels.

****Dual IIG Magnum may be used up to 15 lbs./A (broadcast basis) on soils having an organic matter content between 6% and 20% for extended residual control and where severe stands of labeled weeds are expected.

Restriction: Do not apply more than the equivalent of 15 lbs. of Dual IIG Magnum per acre during any one year, or illegal residues may result. This includes both Dual IIG Magnum and Dual Magnum or Dual II Magnum formulations (1 pt. of these Dual Magnum formulations is equivalent to 6 lbs. of Dual IIG Magnum).

POTATOES

Apply Dual IIG Magnum either incorporated or preemergence according to the directions specified below for control of weeds listed under the **Product Information** section. Within a rate range, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter. Effectiveness may be reduced if later cultural practices expose untreated soil or change the soil distribution pattern of Dual IIG Magnum.

Incorporated: Apply Dual IIG Magnum at 6-12 lbs./A broadcast to the soil and incorporate into the top 3 inches before planting, using a finishing disk, harrow, rolling cultivator, or similar implement. Planting and later cultural practices should avoid bringing untreated soil to the surface. Postplant incorporated application may be made any time after planting to drag-off, but before potato emergence. Incorporate, using an implement that distributes Dual IIG Magnum within the top 1-2 inches of soil. Do not damage potato seed pieces or sprouts with incorporation equipment.

Preemergence: Apply Dual IIG Magnum at 6-12 lbs./A broadcast, either after planting as a preemergence, delayed preemergence, after drag-off or hilling treatment, but before weeds emerge. Up to 15 lbs./A of Dual IIG Magnum broadcast may be used where soil organic matter is between 6% and 20%.

Restrictions and Precautions: (1) Do not use on muck or peat soils. (2) If cool, wet soil conditions occur after application, Dual IIG Magnum may delay maturity and/or reduce yield of Superior and other early maturing potato varieties. To avoid crop injury, (3) Do not use on sweet potatoes or yams. (4) Do not apply both preemergence and incorporated treatments to the same crop, and (5) Do not use on potatoes in Kern County, CA.

Restriction: To avoid illegal residues, potatoes treated with Dual IIG Magnum must not be harvested within 60 days after the last application.

Rotational Crops

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

(1) If the crop treated with Dual IIG Magnum is lost, any crop on this label may be replanted immediately. Do not make a second broadcast application of Dual IIG Magnum. 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) Barley, oats, rye, or wheat may be planted 4 1/2 months following application; alfalfa may be planted 4 months following application. (3) Any crop on this label in addition to cotton, cabbage, peppers, pod crops, safflowers, grain or forage sorghum*, root crops, tobacco, barley, buckwheat, milo, oats, rice, rye, and wheat may be planted in the spring following treatment. Clover may be seeded 9 months following application. Restriction: Do not graze or feed forage or fodder from cotton to livestock.

*Provided the seed has been properly treated with Concep® seed protectant.

Important Restriction: To avoid injury to rotational alfalfa or clover, do not apply more than 1.9 lbs. of active ingredient (12 lbs. of Dual IIG Magnum) either preplant surface, preplant incorporated, preemergence, or postplant incorporated.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a dry place.

Pesticide Disposal

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling [50 lb. bag]

Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, 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.

Container Handling [Bulk]

Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, 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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Syngenta Crop Protection at 1-800-334-9481

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