POTATOES

General Information

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.

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 onboard 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.

Limitations, Restrictions, and Exceptions

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Apply Dual IIG MAGNUM either incorporated or preemergence according to the directions specified for control of weeds listed. 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%.

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.

Note: To avoid illegal residues, potatoes treated with Dual IIG MAGNUM should not be harvested

within 60 days after the last application.

Method
Soil incorporation
Rates
field_rates 0

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Restricted Entry Interval

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.

Timings

Preemergence (Crop)
Preplant Incorporated
Preemergence (Weed)
Post-plant