

Dual® 25G

Granular Herbicide

For weed control in corn, peanuts,
potatoes, soybeans, and ornamentals

50 Pounds
Net Weight



Active Ingredient:

Metolachlor: 2-chloro-N-(2-ethyl-
6-methylphenyl)-N-(2-methoxy-1-
methylethyl) acetamide

25.0%

Inert Ingredients:

75.0%

Total:

100.0%

Control No. 52600

Dual 25G is a granular herbicide

Keep Out of Reach of Children.

Caution

See additional precautionary statements
on back of bag.

EPA Reg. No. 100-638

See directions for use on back of bag.

CIBA-GEIGY

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.

Conditions of Sale and Warranty

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

CIBA-GEIGY 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. CIBA-GEIGY makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall CIBA-GEIGY or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. CIBA-GEIGY 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 CIBA-GEIGY.

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DIRECTIONS FOR USE

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

No user shall permit the application of this product in such a manner as to directly or indirectly expose workers or other persons except those knowingly involved in the application. The area being treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until dusts have settled.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given which inform workers of areas or fields that may not be entered without specific protective clothing until dusts have settled, and appropriate actions to take as described under Precautionary Statements at the end of this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "CAUTION. Area treated with Dual 25G on (date of application). Do not enter without appropriate protective clothing until dusts have settled. In case of accidental exposure, flush eyes or skin with plenty of water. Call a physician if irritation persists. Remove and wash contaminated clothing before reuse."

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

General Information

Dual 25G will control many annual grasses and certain broadleaf weeds in corn, peanuts, potatoes, soybeans, and ornamentals. 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 prior to planting or left on the soil surface during or after planting. Dry weather following application of Dual 25G 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 following the use of Dual 25G under abnormally high moisture conditions during early development of the crop.

Weeds Controlled

barnyardgrass (watergrass)	green foxtail	yellow foxtail
crabgrass	prairie cupgrass	<u>yellow nutsedge</u>
crowfootgrass	red rice	black nightshade
fall panicum	signalgrass	carpetweed
foxtail millet	(Brachiaria)	Florida pusley
giant foxtail	southwestern cupgrass	galinsoqa
goosegrass	witchgrass	pigweed

Weeds Partially Controlled*: common purslane, hairy nightshade, sandbur, seedling johnsongrass, shattercane and volunteer sorghum.

*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 25G is to be applied preplant incorporated, this tillage may be used to incorporate Dual 25G if uniform 2 inch incorporation is achieved as recommended under Application Procedures.
- 2) Plant crop into moist soil immediately after tillage. If Dual 25G is to be used preemergence, apply at planting or immediately after planting.
- 3) If available, sprinkler irrigate within 2 days after application. Apply 1/2-1 inch of water. Use lower water volume (1/2 inch) on coarse-textured soils and higher volume (1 inch) on finer 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.

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Application Procedures

Dual 25G may be applied either broadcast or banded.

Broadcast Treatment - Dual 25G may be applied with a broadcast type granular applicator or with a cyclone type spreader. Use applicators and techniques that will apply the granules uniformly to the soil.

Band Treatment - Dual 25G 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 seeding 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.

Applicator settings are given for band applications in Chart 1. These settings were determined under laboratory conditions to $\pm 5\%$ 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 prior to 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 25G needed for band treatment as follows:

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

Example: If 16 lbs. per acre is recommended for broadcast application and you wish to treat a band 14 inches wide in crop rows spaced 30 inches apart:

$$\frac{14}{30} \times 16 = 7.5 \text{ lbs. of granules needed for each acre that is to be treated.}$$

Do not apply Dual 25G during periods of high winds. Wind may disrupt placement of the granules and reduce weed control. Locate granular diffusers close to the ground to reduce granular displacement. Wind shield attachments are advisable.

Chart 1: Granular Applicator Settings For 14 Inch Band Width*

Applicator Brand	Equivalent Broadcast Rate Per Acre					
	Speed MPH	6 Lbs.	8 Lbs.	10 Lbs.	12 Lbs.	16 Lbs.
Gandy Two-opening (For 14" band) Model No. S-902	4	8.5	10	11	12	14
	5	9.5	11	12	13	15.5
	6	10.5	12	13	15	17
International Harvester 1980 & Before Allis Chalmers 1979 & After	4	.80	1.1	1.0	1.2	1.35
	5	.92	1.1	1.15	1.38	1.6
	6	1.0	1.13	1.25	1.45	1.9
International Harvester 1981 & After	4	1.65	1.75	1.85	1.9	2.1
	5	1.75	1.85	1.95	2.0	2.25
	6	1.85	1.95	2.0	2.1	2.45
John Deere (Metal Box)	4	1/19	1/21	1/23	1/25	1/29
	5	1/21	1/23	1/25	1/28	2/1
	6	1/22	1/24	1/27	1/30	2/5
John Deere 1978 & Before Meter Scale 0..10..20.. etc.	4	7	8	10	11	14
	5	8	9	11	13	17
	6	9	10	12	14	18
John Deere 1979 & Later Meter Scale 0..5..15.. etc.	4	5	6	7	9	12
	5	6	7	9	10	13
	6	7	8	10	11	15
Noble 1972 & Before	4	4	5	6	8	10
	5	5	6	8	9	12
	6	6	7	9	11	13
Noble (1973 & Later)	4	3	4	5	6	7
	5	4	5	6	7	9
	6	5	6	7	8	10

*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.

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 25G.
2. Refer to Chart 1 and adjust the setting on your applicator ^{to match} 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 feet:

- 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 ounces per 500 ft. of row, as shown in Chart 2. ^{to match}
6. Repeat this procedure for each granular applicator box.

Chart 2: The Equivalent Broadcast Rate Per Acre in Volume and Weight for 500 Feet on the Basis of a 14 Inch Band

<u>Broadcast Rate Per Acre</u>	<u>Volume Collected In 14-Inch Band 500 Linear Feet</u>	<u>Weight Collected In 14-Inch Band 500 Linear Feet</u>
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.
16 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 25G in Chart 2 as follows:

$$\frac{14 \text{ (Inches)}}{\text{Desired band width (Inches)}} \times 500 = \text{Calibration distance in feet}$$

Example: A band width of 10 inches is to be used, instead of 14 inches, to apply Dual 25G at an equivalent rate of 10 lbs./broadcast acre.

A. $\frac{14 \text{ Inches}}{10 \text{ Inches}} \times 500 \text{ Ft.} = 700 \text{ Ft.}$

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

For control of annual grasses and broadleaf weeds listed under the General Information section, apply Dual 25G either **preplant surface**, preplant incorporated, or preemergence to corn before weeds emerge.

Conventional Tillage

Preplant Incorporated: Broadcast Dual 25G to the soil and incorporate in the top 1-2 inches of soil within 14 days before planting using appropriate surface incorporating equipment at the rate from Table 1.

Preemergence: Band or broadcast Dual 25G 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.

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Table 1: Dual 25G - Corn**

Soil texture	Broadcast rate per acre	
	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: Silty clay loam, sandy clay loam, silty clay, sandy clay, clay loam, clay	8-10 lbs.	10-12 lbs.
Muck or peat soils	DO NOT USE	

*Dual 25G may be used up to 16 lbs. per acre, broadcast basis, on soils having an organic matter content greater than 6%.

**Dual 25G may be used sequentially in place of Dual 8E with AAtrex®, Princep, Bladex®, Banvel®, paraquat, or Roundup applied at the tank mix rate specified on the Dual 8F label or the respective product labels.

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Reduced-Tillage and No Tillage

Preplant Surface Applied: Broadcast Dual 25G up to 45 days before planting corn on medium- and fine-textured soils in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, and WY. Apply 2/3 the recommended broadcast rate of Dual 25G as a split treatment 30-45 days before planting and the remainder 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 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, paraquat or Roundup³). 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 pattern of the Dual granules. Injury may occur from movement of Dual 25G into the planter slit if the slit is not properly closed during planting.

Preemergence: Broadcast Dual 25G at the appropriate rate from Table 1 during or after planting, before weeds emerge, or after weeds present have been killed with a labeled contact. Injury may occur from movement of Dual 25G into the planter slit if the slit is not properly closed during planting.

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Peanuts

Dual 25G Single Applications - All Peanut Growing Areas:

Apply Dual 25G either preplant incorporated, postplant incorporated or preemergence, using the appropriate rate specified below. Preplant Incorporated: Broadcast Dual 25G to the soil surface and incorporate into the top 1-2 inches of soil before planting using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 1-2 inch incorporation. Use a preplant incorporated application if furrow irrigation is to be used, or when a period of dry weather after application is expected. If crop will be planted on beds, apply and incorporate Dual 25G after bed formation. Postplant Incorporated: Broadcast or band Dual 25G 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. Preemergence: Broadcast or band Dual 25G to the soil surface during planting (behind the planter) or after planting, but before weeds or crop emerge.

Apply Dual 25G at a broadcast rate of 6-12 lbs. per acre. Within the 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.

Note: Dual 25G may be applied as directed after any of the following preplant incorporated herbicides when used according to their label recommendations: Balan[®] at 3-4 qts. per acre; Treflan[®] at 1 pt. per acre; or Vernam[®] at 2.3-3 pts. per acre. Dual 25G may be applied as directed prior to a sequential treatment of Dynam[®] applied preemergence to cracking time using 6 qts. Dynam per acre as specified for use on that label.

Soybeans

For control of annual grasses and broadleaf weeds in the General Information section, apply Dual 25G either preplant surface, preplant incorporated or preemergence to soybeans before weeds emerge.

Conventional Tillage

Preplant Incorporated: Broadcast Dual 25G to the soil surface and incorporate in the top 1-2 inches of soil within 14 days before planting using a finishing disk, harrow, or other appropriate tillage equipment at the appropriate rate from Table 2.

Preemergence: Band or broadcast Dual 25G 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.

Table 2: Dual 25G - Soybeans*

Soil texture	Broadcast rate per acre	
	Less than 3% organic matter	3-6% organic matter
COARSE: Sand, loamy sand, sandy loam	6-8 lbs./A	8 lbs./A
MEDIUM: Loam, silt loam, silt	8-10 lbs./A	8-10 lbs./A
FINE: Silty clay loam, sandy clay loam, silty clay, sandy clay, clay loam, clay	8-10 lbs./A	10-12 lbs./A
Muck or peat soils	DO NOT USE	

*Dual 25G may be used sequentially in place of Dual 8E with Sencor[®], Lexone[®], Lorox[®], Ariben[®], Dynam, or Preseris[®] 3 applied at the tank mix rate specified on the Dual 8E label or the respective product label.

Reduced-Tillage and No Tillage

Preplant Surface Applied: Broadcast Dual 25G up to 45 days before planting soybeans on medium- and fine-textured soils in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, WI, and WY. Apply 2/3 the recommended broadcast rate of Dual 25G as a split treatment 30-45 days before planting and the remainder 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 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, paraquat 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 pattern of the Dual granules. Injury may occur from movement of Dual 25G into the planter slit if the slit is not properly closed during planting.

Preemergence: Broadcast Dual 25G at the appropriate rate from Table 2 during or after planting, before weeds emerge, or after weeds present have been killed with a labeled contact. Injury may occur from movement of Dual 25G into the planter slit if the slit is not properly closed during planting.

Potatoes

Apply Dual 25G either incorporated, preemergence, or after hilling/lay-by according to the directions specified below for control of weeds listed under the General 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 will be reduced if later cultural practices expose untreated soil.

Incorporated: Apply Dual 25G before planting at 6-12 lbs. per acre to the soil and incorporate into the surface of the soil 1-2 inches using appropriate tillage equipment. Planting and later cultural practices should not bring untreated soil to the surface. Postplant application may be made any time after planting to drag-off, but before potato emergence. Incorporate using an implement that distributes Dual within the top 1-2 inches of soil. Do not damage potato seed pieces or sprouts with incorporation equipment.

Preemergence: Apply Dual 25G at 6-12 lbs. per acre either after planting as a preemergence, delayed preemergence, after drag-off or hilling treatment, but before weeds emerge. Up to 16 lbs. per acre of Dual 25G alone may be used where soil organic matter is greater than 6%.

After Hilling/Lay-by: Apply 10 lbs. per acre of Dual 25G after hilling/at lay-by to control Dual sensitive weeds for remainder of the growing season. This application will not control emerged weeds. It may be applied over a previous Dual 25G application, but do not apply more than 22 lbs. of Dual 25G per acre in a single crop season.

Note: Do not use on alkali or peat soils. If cool, wet soil conditions occur after application, Dual may delay maturity and/or reduce yield of Superior and other early maturing potato varieties. Do not use on sweet potatoes or yams. Do not apply both preemergence and incorporated treatments.

To avoid illegal residues, potatoes treated with Dual should not be harvested within 60 days after a planting to drag-off application, or within 40 days after a lay-by application. Do not use in Kern County, California.

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Ornamentals (Container, field and liner grown)

Apply Dual 25G using a cyclone or similar type applicator at rates indicated for control of annual grasses and yellow nutsedge.

Broadcast Dual 25G at the rate of 8-16 lbs. per acre on established ornamentals, or to ornamentals at least 5 days after transplanting, but before grass weeds or yellow nutsedge emerge, or after existing weeds or nutsedge plants have been removed. A second application may be needed to provide grass and yellow nutsedge control for an extended period. Do not make more than 2 applications per year.

Use the higher rate of Dual 25G on fine-textured soils, on high organic matter soils, in potting mixes, and where yellow nutsedge and heavy infestations of grass weeds are expected. Use the lower rate on coarse-textured soils with low organic matter content, and where light infestations of grass weeds are expected.

If band applications are to be used, apply an amount proportional to the fraction of area treated.

To control annual broadleaf weeds, a broadcast application of Princep® 4G at 20-25 pounds per acre may be made immediately before or after applying Dual 25G. See the Princep 4G label for application instructions.

Precautions: Do not use Dual 25G alone or in conjunction with Princep 4G on seedbeds or on unrooted cuttings or prior to transplanting. Do not apply Dual 25G to ornamentals whose foliage is wet for the granules may adhere to the foliage and cause injury. Should granules adhere to the foliage, irrigate soon after application to remove the granules and reduce potential damage.

DO NOT USE IN GREENHOUSES OR OTHER ENCLOSED STRUCTURES.

Container Grown Ornamentals

Use in aucuba (Aucuba spp.), holly (Ilex spp.) juniper (Juniperus spp.), and liriopse (Liriope spp.) var. Silver Sunproof.

Princep 4G may be used in conjunction with Dual 25G in aucuba, holly, juniper, and liriopse.

Field and Liner Grown Ornamentals

Use Dual 25G in the following:

Arborvitae (<u>Thuja</u> spp.)*	Honeysuckle (<u>Lonicera</u> spp.)
Aucuba (<u>Aucuba</u> spp.)*	Hybrid Tea Rose (<u>Rosa</u> spp.)
Azalea (<u>Rhododendron</u> spp.), Hershey Red, Herbert, Purple Splendor	Ivy (<u>Hedera</u> sp.), English
Barberry (<u>Berberis</u> spp.), Mentor, Warty, Wintergreen	Japanese Andromeda (<u>Pieris</u> spp.)*
Box Tree (<u>Buxus</u> spp.)	Japanese Red Maple (<u>Acer</u> spp.)
Cotoneaster (<u>Cotoneaster</u> spp.)*	Juniper (<u>Juniperus</u> spp.)*, Andorra, Creeping, Shore, Bar Harbor, Blue Rug
Crabapple (<u>Malus</u> spp.)*	Leucothoe (<u>Leucothoe</u> spp.)*
Dogwood (<u>Cornus</u> sp.), Red Stem	Lilac (<u>Syringa</u> spp.) James McFarland
Euonymus (<u>Euonymus</u> spp.), in- cluding Purpleleaf Winter Creeper	Liriope (<u>Liriope</u> spp.)* Silver Sunproof
Firethorn (<u>Pyracantha</u> spp.)	Maple whips (<u>Acer</u> spp.)*
Forsythia (<u>Forsythia</u> spp.), in- cluding Spring Glory and Golden Bells	Miniature Rose (<u>Rosa</u> spp.)
Holly (<u>Ilex</u> spp.), American, Boxleaf Japanese*, Japanese*, Green Lustre Japanese	Mountain Laurel (<u>Kalmia</u> spp.)
	Osmanthus (<u>Osmanthus</u> spp.)*
	Pachysandra (<u>Pachysandra</u> spp.)
	Privet (<u>Ligustrum</u> spp.)
	Red Oak (<u>Quercus</u> spp.)*
	Rhododendron (<u>Rhododendron</u> spp.)*
	Rosebay (<u>Rhododendron</u> spp.)
	Spiraea (<u>Spiraea</u> spp.)
	Viburnum (<u>Viburnum</u> spp.)
	Weigela (<u>Weigela</u> spp.)*
	Yew (<u>Taxus</u> spp.), Dwarf Japanese*, Hicks

*Dual 25G may be applied in conjunction with Princep 4G on these field and liner grown ornamentals.

Rotational Crops

1) If crop treated with a preplant or preemergence application of Dual 25G is lost, corn, cotton, soybean, safflower, peanuts, potatoes, grain sorghum*, or pod crops** may be replanted immediately. Do not make a second broadcast application of Dual 25G. If the original application was banded and the second crop is planted in the untreated row middle, a second banded treatment may be applied. 2) Barley, oats, rye, or wheat may be planted 4-142 months following a preplant* or preemergence treatment.

Corn, cotton, soybeans, peanuts, potatoes, sorghum, pod crops, root crops, barley, buckwheat, milo, oats, rice, rye, or wheat may be planted in the spring following treatment. Do not graze or feed forage or fodder from treated cotton or pod crops to livestock. All other rotational crops may be planted 18 months after application. 3) Corn, cotton, soybeans, peanuts, potatoes, safflower, sorghum or pod crops may be planted in the spring following a lay-by treatment. All other rotational crops may be planted 18 months after a lay-by application.

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

**Pod crops including: garbanzo, great northern beans, guar, kidney beans, lima beans, mung beans, navy beans, okra, English peas, southern peas (such as blackeye, pinkeye, crowder, etc.), pinto beans, and snap beans (green, wax, string).

Storage and Disposal

Pesticide Storage and Disposal

Store in a dry place. Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be used according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal

Completely empty into application equipment. Dispose of empty bin in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. Stay out of smoke from burning bins.

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 (911) 292-7100 day or night.

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Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

The active ingredient, metolachlor, may cause skin sensitization reactions in certain individuals. Wear protective clothing (coveralls and gloves) while handling or using this product. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing dust. Causes eye irritation. Avoid contact with eyes, skin or clothing. Do not contaminate food or feed.

Practical Treatment: In case of contact with eyes or skin, wash immediately with plenty of water. Get medical attention if irritation persists. If inhaled, move to clean air. If swallowed, give one or two glasses of water and induce vomiting by placing fingers in back of throat, and contact a local poison control center, hospital or physician immediately. Never give anything by mouth to an unconscious person.

Environmental Hazards

Do not apply directly to any body of water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes.

Dual® trademark of CIBA-GEIGY for metolachlor
U.S. Patent No. 3,937,730

Amben® trademark of Union Carbide Agricultural Products, Inc.

AAtrex® trademark of CIBA-GEIGY for atrazine

Balan® trademark of Elanco Products for benefin

Banvel[®] trademark of Velsicol Chemical Corp. for dicamba

Bladex[®] trademark of Shell Chemical Company for cyanazine

Concep[®] trademark of CIBA-GEIGY
U.S. Patent No. 4,070,389

Dyanap[®] trademark of Uniroyal Chemical for Alanap[®]-Dinitro

Lexone[®] trademark of E. I. duPont de Nemours and Co. for
metribuzin

Lorox[®] trademark of E. I. duPont de Nemours and Co. for linuron

Premerge[®] trademark of the Dow Chemical Company for dinoseb

Princep[®] trademark of CIBA-GEIGY for simazine

Roundup[®] trademark of Monsanto Company for glyphosate herbicide

Sencor[®] trademark of the Parent Company of Farbenfabriken Bayer
GmbH, Leverkusen, for metribuzin

Treflan[®] trademark of Elanco Products for trifluralin

Vernam[®] trademark of Stauffer Chemical Company for vernolate

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Agricultural Division
CIBA-GEIGY Corporation
Greensboro, North Carolina 27419

CGA 49L23D

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Revised December 1, 1983
Revised January 23, 1984
Revised May 31, 1984

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Mr. Richard Conn
Ciba-Geigy Corporation
Agricultural Division
P.O. Box 18300
Greensboro, NC 27419

JUN

Dear Mr. Conn:

Subject: Minimum and No-Tillage Corn, Soybeans
Dual 25G Granular Herbicide
EPA Registration No. 100-638
Your Submission Dated May 31, 1984

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A) is acceptable provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. Under the dosage rate tables for corn and soybeans, delete the asterisked paragraphs referring to use of Dual 25G sequentially in place of tank mixes of Dual 25G. These paragraphs are confusing. Under soybeans, we would accept a reference to substituting Dual 25G for Dual 8E used sequentially with Promerge 3, provided adequate directions for the sequential use appear on the Dual 25G label.
 - b. Under Potatoes, Incorporated, the additional phrase xxx before planting xxx is inconsistent with the remaining text. Previously accepted text suggests incorporation is appropriate for pre- and postplant applications. Clarify the directions.
 - c. Under Rotational Crops, do not add the qualifier "treated" to the forage restriction statement for cotton and pod crops. Dual 25G is not used on these crops and your proposal text would be inconsistent with the language used on Dual 25G. If you propose to delete the forage restriction for the rotated crops, you should propose amendments for both labels adequately supported with residue data citations.

3. Submit four (4) copies of your 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 sec. 6(e). Your release for shipment of the product bearing the proposed labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Richard C. Mountfort, Jr.
Product Manager (23)
Fungicide-Ferbicide Branch
Registration Division (75-767)

enclosure

PD-FHB:DFB-32-35;Mountfort;Raven;17-2226;PD-24;11/84;15-1.6/24/84;

REST DOCUMENT AVAILABLE