

352-768

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

SEP 6 2011

Tim McPherson  
E.I. du Pont de Nemours and Company  
1007 Market Street  
Wilmington, DE 19898

Subject: Supplemental Label (For Preemergence and Postemergence Use in  
Field Corn in the State of California)  
DuPont Matrix SG Herbicide  
EPA Reg. No. 352-768  
Application Dated August 11, 2011

Dear Mr. McPherson:

The supplemental labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable.

The supplemental labeling must be incorporated into the main product labeling within eighteen (18) months of the date of this letter.

A stamped copy of your label is enclosed for your records. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact Mindy Ondish at (703)605-0723 or at [ondish.mindy@epa.gov](mailto:ondish.mindy@epa.gov).

Sincerely,

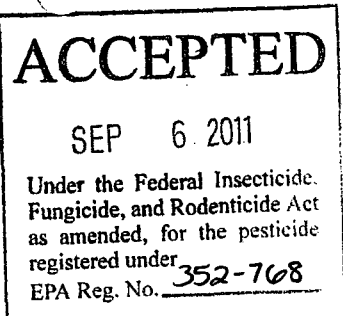
A handwritten signature in black ink, appearing to read "Kable Bo Davis".

Kable Bo Davis  
Product Manager 25  
Herbicide Branch  
Registration Division (7505P)

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DuPont Crop Protection



### SUPPLEMENTAL LABELING

**DUPONT™ MATRIX® SG  
FOR PREEMERGENCE AND  
POSTEMERGENCE USE IN FIELD  
CORN IN THE STATE OF CA**

## DUPONT™ MATRIX® SG HERBICIDE

EPA REG. NO. 352-768

This supplemental label expires on October 1, 2014 and must not be used or distributed after this date.

# FOR PREEMERGENCE AND POSTEMERGENCE USE IN FIELD CORN IN THE STATE OF CALIFORNIA

### DIRECTIONS FOR USE

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

DuPont™ MATRIX® SG must be used only in accordance with directions on this label and the label affixed to the product package.

DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed on the label. User assumes all risks associated with such non-directed use.

### PRODUCT INFORMATION

MATRIX® SG herbicide is a water soluble granule containing 25% active ingredient by weight. MATRIX® SG is a selective herbicide for burndown and residual control of certain annual grass and broadleaf weeds when applied fallow, preemergence and postemergence to field corn. MATRIX® SG may be applied in tank mix combinations with other corn herbicides for improved burndown and residual control. Residual weed control is dependent on rainfall, sprinkler irrigation, flood irrigation or furrow irrigation for herbicide activation. Furrow irrigation may not provide proper activation on tops of beds if rainfall or furrow irrigation does not drive MATRIX® SG into the soil and weed root zones.

MATRIX® SG is absorbed through the roots and leaf tissue of plants, rapidly inhibiting the growth of susceptible weeds. Rainfall or sprinkler irrigation is needed to move MATRIX® SG into the soil. Susceptible weeds will generally not emerge from a preemergence application. In some cases, susceptible weeds may germinate and emerge a few days after application, but growth then ceases and leaves become chlorotic three to five days after emergence. Death of leaf tissue and growing point will follow in some species, while others will remain green, stunted and non-competitive.

The herbicidal action of MATRIX® SG may be less effective on weeds stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, or cultural practices.

MATRIX® SG treatments are most effective in controlling weeds when adequate rainfall or irrigation is received 5 -7 days after application. If cultivation is necessary because of soil crusting, soil compaction or weed germination before rain or irrigation occurs, use shallow tillage such as rotary hoe to lightly incorporate MATRIX® SG and make certain corn seeds are below the tilled area.

MATRIX® SG is best used in a planned sequential application herbicide program, to be followed by an in-crop application of MATRIX® SG, DuPont™ STEADFAST® Q, and/or other post applied corn herbicides. Refer to the label of the respective sequential partner for specific use directions.

Do not apply to field corn grown for seed, to popcorn or to sweet corn.

Do not apply more than 1.5 ounce per acre preemergence to field corn.

Do not apply more than 1.0 ounce per acre postemergence to field corn.

Do not apply more than a total of 2.0 ounces per acre of MATRIX SG (or 0.5 oz active ingredient rimsulfuron) during the crop year. This includes combinations of preemergence or postemergence applications of MATRIX SG; as well as rimsulfuron from application(s) of products such as DuPont STEADFAST Q.

Limit preemergence rates of MATRIX SG to a maximum of 1.25 oz product if following with postemergence applications of the rimsulfuron containing products above.

Allow at least 4 weeks between preemergence applications of MATRIX SG and postemergence applications of MATRIX SG. Make sequential applications after the corn has reached the 2-collar stage but before the corn exceeds the maximum application height listed on the respective product labels.

Do not apply preemergence to coarse-textured soils (sand, loamy sand or sandy loam) with less than 1% organic matter.

Apply MATRIX® SG to field corn hybrids with a relative maturity (RM) of 77 days or more, including "food grade" (yellow dent, hard endosperm), waxy and High-Oil corn. Not all field

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corn hybrids of less than 77 days RM, not all white corn hybrids nor Hi-Lysine hybrids have been tested for crop safety, nor does DuPont have access to all seed company data.

Consequently, injury arising from the use of MATRIX® SG on these types of corn is the responsibility of the user. Consult with your seed supplier before applying MATRIX® SG to any of these corn types. Seed company publications indicate "Warning", "Crop Response Warning", or "Sensitive" notations for the use of some ALS herbicides on corn hybrids of 77 CRM or higher. As noted in the seed company publications, DuPont sulfonylurea herbicides such as MATRIX® SG should be used with caution on these hybrids. Consult with your local DuPont representative or the DuPont Label Web Site (<http://cropprotection.dupont.com/>) for any additional supplemental labeling information relative to potential corn hybrid sensitivity to MATRIX® SG.

**APPLICATION INFORMATION**

**Fallow  
Use rates**

Apply MATRIX® SG at 1 to 2 ounces per acre.

**Application Timing**

DuPont™ MATRIX® SG may be used as a fallow treatment, in the fall, winter or spring when the majority of weeds have emerged and are actively growing. Field corn may be planted to this treated area at any time.

**Field Corn**

**WHEN TO APPLY- Preemergence to the Crop**

DuPont™ MATRIX® SG may be applied preemergence or pre-plant to corn. Applications of MATRIX® SG made before weed emergence will provide residual control of labeled weeds. Control of emerged weeds will require the addition of spray adjuvants as noted below.

**Preemergence Rates**

MATRIX® SG may be applied at 1.0 - 1.5 oz product before corn emergence. See cumulative rimsulfuron rate limitations noted above.

**Timing to Crop**

MATRIX® SG herbicide may be used in either conventional, conservation tillage, or no-till crop management systems, and may be applied either preplant, preplant incorporated (less than 2" deep) or preemergence for use in field corn production. Applications of MATRIX® SG made before weed emergence will provide residual control of labeled weeds. Control of emerged weeds will require the addition of spray adjuvants as noted in this label.

Preplant Surface Applied MATRIX® SG is best used in a planned sequential application program, followed by MATRIX® SG, DuPont™ STEADFAST® Q, and other post applied corn herbicide. Refer to the label of the respective sequential partner for specific use directions.

**Preplant/Preemergence Burndown**

Apply MATRIX® SG when weeds are young and actively growing but before they exceed the sizes listed on this label. When weeds exceed listed maximum height or weeds not controlled by MATRIX® SG are present, the addition of burndown herbicide (ie glyphosate, gramaxone, dicamba, and/or 2,4-D) is recommended. If giant ragweed, common cocklebur, henbit, Pennsylvania smartweed or purple deadnettle are present at the time of application, the addition of atrazine will improve control. Observe direction for use and precaution and restrictions on the label of the burndown herbicide. When mixing with liquid nitrogen fertilizer or glyphosate, substitute a non-ionic surfactant for crop oil.

**WHEN TO APPLY - Postemergence to the Crop**

Apply MATRIX® SG to corn that is up to 12 inches tall. Do not apply to corn taller than 12 inches or exhibiting 6 or more leaf collars, whichever is more restrictive.

Applications of MATRIX® SG made after weed emergence will provide contact control of labeled weeds as well as limited residual control of later emergence.

**Postemergence Rates**

MATRIX® SG may be applied at 0.5 - 1.0 oz/acre as a post-emergence broadcast application. DuPont recommends a use rate of 1 oz/acre for most postemergence applications. See cumulative rimsulfuron rate limitations noted above.

**Timing to Emerged Weeds**

- Tank mixtures of MATRIX® SG with glyphosate or glufosinate herbicides may be applied after weeds emerge but before they reach the maximum size listed on the glyphosate or glufosinate herbicide labels.
- Adequate soil moisture is required for optimum activity. Rainfall or irrigation within 5 to 7 days after application will enhance MATRIX® SG residual activity. If activating rainfall, flood, furrow or sprinkler irrigation (>0.5 inch) is not received within 5-7 days after application, follow with a cultivation or with a sequential application of DuPont™ ACCENT® herbicide, if needed.

**Spray Adjuvants**

For control of emerged weeds, application of MATRIX® SG must include an appropriate adjuvant and an ammonium nitrogen fertilizer. If applied in tank mix combination with a glyphosate or glufosinate herbicide that contains a built-in adjuvant system, no additional surfactant needs to be added. Products must contain only EPA-exempt ingredients (40 CFR 1001).

Do not use with spray additives that alter the pH of the spray solution below pH 5.0 or above pH 9.0 as rapid product degradation can occur. Spray solutions of pH 6.0 - 8.0 allow for optimum stability of MATRIX® SG.

**Petroleum Crop Oil Concentrate (COC) or Modified Seed Oil (MSO)**

- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions.

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• MSO adjuvants may be used at 0.5% v/v (0.5 gallon per 100 gallons spray solution) if specifically noted on adjuvant product labeling.

• Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers

**Nonionic Surfactant (NIS)**

• Apply at 0.25% v/v (1 qt per 100 gal spray solution).

• Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

**Ammonium Nitrogen Fertilizer**

• Use 2 qt/acre of a high-quality urea ammonium nitrate (UAN) such as 28%N or 32%N, or 2 lb/acre of a spraygrade ammonium sulfate (AMS).

**Special Adjuvant Types**

• Combination adjuvant products may be used at doses that provide the required amount of NIS and ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions.

**WEEDS CONTROLLED/SUPPRESSED**

**Fallow/Fieldcorn - Postemergence to Weeds - MATRIX® SG Alone**

**Grasses (1 - 2 inches)**

- Barley, volunteer
- Barnyardgrass
- Bluegrass, annual
- Crabgrass, large (1/2")
- Cupgrass, woolly (1")
- Foxtail (bristly, giant, green, yellow)
- Johnsongrass, seedling\*
- Millet, Wild Proso\*
- Panicum, fall
- Quackgrass\*
- Ryegrass, Italian\*
- Shattercane (4")
- Signalgrass, broadleaf\*
- Stinkgrass\*
- Wheat, volunteer
- Wild Oat\*
- Yellow Nutsedge\*

**Broadleaves (1 - 2 inches)**

- Canada thistle
- Chickweed, common
- Cocklebur
- Dandelion (6" diameter)
- Henbit
- Kochia
- Lambsquarters, common
- Morningglory, ivyleaf\*
- Mustard (birdrape, black, wild)
- Nightshade, hairy\*
- Pigweed (prostrate, redroot, smooth)
- Purslane, common\*

- Ragweed, common\*
- Shepherd's purse
- Smartweed, Pennsylvania\*
- Wild Radish
- Velvetleaf\*
- \*partial control/suppression

**Fallow/Field Corn - Preemergence and Residual\* - MATRIX® SG Alone**

**Grasses**

- Barnyardgrass
- Bluegrass, annual
- Crabgrass, large
- Foxtail (bristly, giant, green, yellow)
- Panicum, fall
- Ryegrass, Italian
- Signalgrass, broadleaf
- Wheat, Volunteer
- Wild Oat

**Broadleaves**

- Carpetweed
- Chamomile, false
- Cocklebur
- Filaree, Redstem
- Henbit
- Jimsonweed
- Kochia (ALS-sensitive)
- Lambsquarters, common
- Morningglory, ivyleaf
- Mustard (birdsrape, black)
- Nightshade (hairy, black)
- Palmer amaranth
- Pigweed (prostrate, redroot, smooth)
- Purslane, common
- Ragweed, common
- Russian thistle, seedling
- Smartweed, Pennsylvania
- Velvetleaf

\*Partial control or suppression - for full season control, follow with a sequential, in-crop application of MATRIX® SG or DuPont™ STEADFAST® Q with appropriate tank mix partners.

**Tank Mixtures**

**Fallow**

MATRIX® SG may be used as a fallow treatment, and may be tank mixed with other herbicides that are registered for use in fallow. Read and follow all applicable use instructions on this label and the labels of any tank mix partner before using in mixtures with MATRIX® SG. Do not use the tank mix partner if its label conflicts with this MATRIX® SG label.

**Field Corn**

MATRIX® SG may be tank mixed with full or reduced rates of preemergence grass and broadleaf herbicides such as atrazine, glyphosate, paraquat, dicamba, and 2,4-D to provide added residual activity or burndown activity on emerged weeds. Consult tank mix partner labeling for rate and soil-type restrictions. Read and follow all manufacturers' label instructions for

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the companion herbicide(s). Do not use a tank mix partner product if its label conflicts with this MATRIX® SG label.

Ensure the tank mix product is labeled for the same timing, method of application, adjuvants, and use restrictions as MATRIX® SG, as well as other products used in the tank mixture.

Read and follow all applicable use directions, precautions, and limitations specified on the respective product labels.

**Postemergence to the Crop**

**Tank Mixtures with Glyphosate**

When used in tank mixture with glyphosate, MATRIX® SG will deliver improved burndown and/or residual activity on the following weeds, as compared to glyphosate used alone.

Glyphosate may be tank mixed with post emerge applications of MATRIX® SG when made to corn hybrids containing the "Roundup Ready" or "Agrisure" gene. Consult with your seed supplier to confirm the corn hybrid is "Roundup Ready" before making any herbicide application containing glyphosate herbicides.

Refer to the Spray Adjuvants section for additional information on proper adjuvant selection.

- Barley, volunteer
- Barnyardgrass
- Bluegrass, annual
- Canada thistle
- Chamomile, false
- Chickweed, common
- Cocklebur
- Crabgrass
- Dandelion (6" diameter)
- Filaree, redstem
- Foxtail (bristly, giant, green, yellow)
- Henbit
- Johnsongrass, seedling
- Kochia
- Lambsquarters, common
- Millet, Wild Proso
- Morningglory, ivyleaf
- Mustard (birdsrape, black, wild)
- Nightshade, hairy
- Panicum, fall
- Pigweed (prostrate, redroot, smooth)
- Purslane, common
- Quackgrass
- Ragweed, common
- Ryegrass, Italian
- Sandbur (field, longspine)
- Shepherd's purse
- Signalgrass, broadleaf
- Smartweed, Pennsylvania
- Stinkgrass
- Velvetleaf
- Wheat, volunteer
- Wild buckwheat
- Wild oat
- Wild radish
- Yellow Nutsedge

**Tank Mixtures with Glufosinate**

MATRIX® SG may be tank mixed with glufosinate herbicide if applications are made to corn hybrids containing the "Liberty Link" gene. Consult with your seed supplier to confirm the corn hybrid is "Liberty Link" before applying any herbicide containing glufosinate. When used in a tank mixture with glufosinate herbicide, MATRIX® SG will deliver improved burndown and/or limited residual activity on the following weeds, as compared to glufosinate used alone:

- Velvetleaf
- Pigweed, redroot
- Lambsquarters, common
- Foxtail (giant, yellow)

**MATRIX® SG ROTATIONAL CROP GUIDELINES - FIELD CORN**

For crops listed below, planting prior to the interval shown may result in crop injury when using MATRIX® SG. Rotation intervals may need to be extended to 18 months if drought conditions prevail after application and before the rotational crop is planted, unless supplemental sprinkler irrigation has been applied and totals greater than 15" during the growing season. For tank mixtures, follow the most restrictive rotational crop guideline.

Rotation Crop	Interval (months)
Beans, Dry	10
Beans, Snap	10
Corn, Field	Anytime
Corn, Sweet	10
Cotton	10
Cucumber	10
Garlic	6
Potatoes	Anytime
Soybeans	10
Tomatoes	Anytime
Wheat, Winter	4
Crops Not Listed	12

Rotational crops may be planted at indicated intervals provided the fields are deep disked or plowed, and thorough soil mixing is achieved, prior to planting the rotational crop.

**Mixing Instructions**

MATRIX® SG must be completely dissolved in clean water before adding to spray tanks that do not have continuous agitation during loading and mixing. Water Carrier Instructions

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of MATRIX® SG.
3. Continue agitation until the MATRIX® SG is fully dissolved, at least 5 minutes.
4. Once the MATRIX® SG is fully dissolved, maintain agitation and continue filling tank with water.
5. As the tank is filling, add tank mix partners and then add the required volume of spray adjuvant. Always add spray adjuvant last. Antifoaming agents may be used.

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6. Dispersed tank mix partners can settle if the tank mixture is not continually agitated. If settling occurs, thoroughly re-agitate before using.

7. Apply MATRIX® SG spray mixture within 24 hours of mixing to avoid product degradation.

8. If MATRIX® SG and a tank mix partner are to be applied in multiple loads, fully dissolve the MATRIX® SG in clean water prior to adding to the tank.

If the selected companion herbicides has a ground water advisory, consider this advisory when using the companion herbicide.

**Application and Spray Volumes**

**Ground**

Use a minimum of 15 gallons of water per acre (GPA) to ensure thorough coverage of the weeds and the best performance. Use a minimum of 10 GPA for light, scattered stands of weeds. For best performance, select nozzles and pressure that deliver MEDIUM spray droplets, as indicated, for example, by ASABE Standard S572.1. Nozzles that deliver COARSE spray droplets may be used to reduce drift, provided spray volume is increased to maintain coverage on small weeds.

For optimal product performance and minimal spray drift, adjust the spray boom to the lowest possible spray height recommended in manufacturers' specifications. Ensure that equipment is set up to avoid applying an excessive rate directly over the rows and into the corn plant whorl. Overlaps or starting, stopping, slowing, and turning while spraying may result in crop injury.

**Aerial**

Do not apply by air in CA.

**USE RESTRICTIONS/PRECAUTIONS**

- DuPont™MATRIX® SG may interact with certain insecticides previously applied to the crop. Crop response varies with field corn type, insecticide used, insecticide application methods, and soil type.

- MATRIX® SG may be applied to corn previously treated with nonorganophosphate soil insecticides regardless of soil type.

- Allow at least 60 days between a preemergence or preplant application of MATRIX® SG and application of organophosphate insecticide since crop injury may result. Do not apply MATRIX® SG within 45 days of crop emergence where an organophosphate insecticide was applied as an in-furrow treatment since crop injury may occur.

- Do not tank mix MATRIX® SG with foliar-applied organophosphate insecticides such as "Lorsban", malathion, parathion, etc, as severe crop injury may occur.

- Do not tank mix MATRIX® SG with "Basagran" or severe crop injury may occur.

- Do not graze, feed forage, grain or fodder (stover) from treated areas to livestock within 30 days of MATRIX® SG application.

- Do not irrigate MATRIX® SG into coarse soils at planting time when soils are saturated.

- Injury or loss of desirable trees or vegetation may result from failure to observe the following:

- Do not apply MATRIX® SG or drain or flush application equipment on or near desirable trees or other plants, or in areas where their roots may extend or in locations where the chemical may be washed or moved into contact with their roots.

- Do not use on lawns, walks, driveways, tennis courts, or similar areas.

- Prevent drift or spray onto desirable plants.

- Do not contaminate any body of water

- Thoroughly clean application equipment immediately after use.

- Do not treat frozen soil.

- Do not apply through any type of irrigation system.

- Do not use flood or furrow irrigation to apply MATRIX® SG.

Crop injury may occur following an application of MATRIX® SG if there is a prolonged period of cold weather and / or in conjunction with wet soils.

**IMPORTANT NOTICE**

**BEFORE BUYING OR USING DUPONT PRODUCT(S) COVERED BY THIS LABEL, READ THIS LABEL AND THE LABELS FOR ALL PRODUCTS REFERENCED IN THIS LABEL, IN THEIR ENTIRETY. FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS.**

This label contains supplemental instructions for use of the referenced DuPont product. Follow these instructions carefully. This label must be in the possession of the user at the time of application.

Read the Limitation of Warranty and Liability on the Section 3 Federal product label before buying or using this product. If terms are not acceptable, return the unopened package at once to Seller for full refund of purchase price paid. Otherwise, use by Buyer or any other User constitutes acceptance of the terms of the Limitation of Warranty and Liability on the Section 3 Federal product label.

The DuPont Oval Logo, DuPont™, MATRIX® SG and STEADFAST® Q are trademarks or registered trademarks of E. I. duPont de Nemours and Company

"Liberty" is a registered trademark of Bayer Crop Science

"Basagran" is a trademark or registered trademark of BASF

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"Agrisure" is a trademark or registered trademark of a Syngenta Group Company

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