

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

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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

JAN - 5 2010

Subject:

Supplemental Label (Use on Optimum® GAT® Herbicide Tolerant Field Corn and

Soybeans)

DuPont Rimsulfuron 25 SG Herbicide

(Alternate Brand Name: DuPont Resolve SG Herbicide

EPA Reg. No. 352-748

Application Dated September 12, 2008

Dear Mr. McPherson:

The supplemental labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable, provided that you do the following:

- 1. Submit the following data for rimsulfuron within two (2) years from the date of this letter as a condition of registration for the new uses on Optimum[®] GAT[®] field corn and Optimum[®] GAT[®] soybeans:
 - a. Guideline 870.6200: Acute & Subchronic Neurotoxicity
 - b. Guideline 870.7800: Immunotoxicity
 - c. Guideline 870.3250: Subchronic 21/28-Day Dermal Toxicity
- 2. Submit the following outstanding data by **August 2, 2011** as stated in the conditional-registration notice for *DuPont DPX-E9636 Technical FNV Herbicide*, Reg # 352-671.
 - a. <u>Guideline 850.1300: Aquatic Invertebrate Life-cycle</u> Study must be conducted on the terminal and persistent degradates IN-70942.
 - b. <u>Guideline 850.1400: Freshwater Fish Early Life-stage</u>
 Study must be conducted on the terminal and persistent degradates IN-70942.
 - c. <u>Guideline 835.4100: Aerobic Soil Metabolism</u>
 Study must be conducted using two U.S. soils from relevant use areas.

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- d. <u>Guideline 835.4300: Aerobic Aquatic Metabolism</u>
 Study must be conducted in a relevant natural water sediment system.
- e. <u>Guideline 835.4400: Anaerobic Aquatic Metabolism</u>
 Study must be conducted in a relevant natural water sediment system.
- 3. Submit and/or cite all data required for registration/registration review of your product when the Agency requires all registrants of similar products to submit data.
- 4. Submit production information (in pounds or gallons produced) for this product for the fiscal year in which the uses on **Optimum GAT field corn and Optimum GAT soybeans** are conditionally registered, in accordance with FIFRA §29. The fiscal year begins October 1 and ends September 30. The production information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information must be submitted to:

Mr. Owen F. Beeder U.S. Environmental Protection Agency Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Avenue, NW Washington, DC 20460

- 5. Add the following ground water advisory statement to the Environmental Hazards section for all end-use products containing rimsulfuron:
 - "Ground Water Advisory: This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow."
- 6. Add the following surface water advisory statement to the Environmental Hazards section for all end-use products containing rimsulfuron:
 - "Surface Water Advisory: This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several weeks after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of rimsulfuron from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours."

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- 7. Submit a label amendment for the rimsulfuron technical product to add the new uses on "Optimum® GAT® field corn" and "Optimum® GAT® soybeans". The technical product registration must be amended to include the above new uses before any end-use product(s) can be used on Optimum® GAT® field corn and Optimum® GAT® soybeans.
- 8. Make the following changes to the supplemental label:
 - a. Change the paragraph under Directions for Use to "Read and follow all manufacturer's label **directions** for any companion herbicide(s). If those **directions** conflict with this label, do not tank mix the herbicide(s) with RESOLVE® SG."
 - b. Change the paragraph under Tank Mixtures to "Weed control and crop safety...or in separately published DuPont **directions**, are the responsibility of the user."
 - c. Change the sentence under Rotational Crop Guidelines to "The following rotational intervals **must** be observed when using RESOLVE® SG."
 - d. Change the phrase in the footnote paragraph under 1 oz and 2 oz Maximum Use Rate to "the rotational intervals **must** be extended to 18 months if drought conditions prevail..."
 - e. Change the sentence under Greater than 2 oz Maximum Use Rate to "All other crops **must** be planted after 18 months."
 - f. Remove the trademark references "CLASSIC®" and "SYNCHRONY®" at the bottom of page 4 since they are not mentioned on the label.
- 9. Make the following changes to the main label:
 - a. Add the ground water and surface water advisory statements listed above in items 5 & 6 to the Environmental Hazards section.
 - b. On page 5, change the heading from "Broadcast Application" to "Ground Application".
 - c. On page 5 under Broadcast [Ground] Application, remove the phrase "For best performance," so the sentence reads "Select nozzles and pressure that deliver MEDIUM spray droplets..."
 - d. On page 6 under Aerial Application, revise the second sentence to read "Use **MEDIUM** or **COARSE** nozzles that will provide optimum spray distribution and maximum coverage at a minimum of 5 GPA."

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- e. On page 6 under Aerial Application, revise the third sentence to read "Do not apply during a temperature inversion, when wind speed is less than 3 mph or above 10 mph, or when conditions favor poor coverage and/or off-target spray drift."
- f. On page 7 under Wind, change the sentence from "AVOID APPLICATION DURING GUSTY OR WINDLESS CONDITIONS." to "Do not apply when wind speed is less than 3 mph or above 10 mph."
- 10. At your next label printing, or within eighteen (18) months of the date of this letter, whichever comes first, you must incorporate this supplemental labeling into the main product labeling.

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 or the next printing of the label, whichever occurs first, 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.

Sincerely,

Jim Tompkins
Product Manager 25

Herbicide Branch

Registration Division (7505P)

ACCEPTED with COMMENTS in EPA Letter Dated

JAN - 5 2010

DuPont Crop Protection

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

DUPONT™ RESOLVE® SG
HERBICIDE
FOR USE ON DUPONT™ OPTIMUM®
GAT® HERBICIDE TOLERANT CORN
AND SOYBEANS

352-748

DUPONT™ RESOLVE® SG HERBICIDE

EPA REG. NO. 352-748

FOR USE ON DUPONT™ OPTIMUM® GAT® HERBICIDE TOLERANT CORN AND SOYBEANS

DuPont™ RESOLVE® SG Herbicide (RESOLVE® SG) may be applied to OPTIMUM® GAT® (OPTIMUM® GAT®) corn and OPTIMUM® GAT® soybeans for preemergence and postemergence control of certain annual grass and broadleaf weeds.

RESOLVE® SG is a water soluble granule which contains 25% active ingredient by weight. Residual weed control is dependent on rainfall or sprinkler irrigation for herbicide activation.

DIRECTIONS FOR USE

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

RESOLVE® SG may be used in OPTIMUM® GAT® corn and OPTIMUM® GAT® soybeans to provide weed control, and may be used in combination with other suitable registered herbicides. Applications may be made pre-plant (burndown treatments), pre-emergence, postemergence, and/or post-harvest.

Read and follow all manufacturers label recommendations for any companion herbicide(s). If those recommendations conflict with this label, do not tank mix the herbicide(s) with RESOLVE® SG.

Application to OPTIMUM® GAT® Soybeans - Use Rates and Restrictions

Apply 0.5 to 4.0 ounces of RESOLVE® SG per acre per application. For postemergence applications, do not apply later than flowering (R2 growth stage). Allow 14 days between application and grazing or feeding soybean forage or hay. Do not apply more than 4.0 ounces of RESOLVE® SG per acre per crop season. Application to emerged OPTIMUM® GAT® soybeans may result in crop injury.

Application to OPTIMUM® GAT® Corn – Use Rates and Restrictions

Apply 0.5 to 4.0 ounces of RESOLVE® SG per acre per application. For postemergence applications, do not apply later than 7 days before grain harvest. Allow at least 7 days between application and grazing or feeding corn forage or stover. Do not apply more than 4.0 ounces of RESOLVE® SG per acre per crop

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TANK MIXTURES

RESOLVE® SG may be tank mixed with other products that are registered for use on soybeans or corn and where the labeled method of application and timing of application are the same as for RESOLVE® SG. If another herbicide is tank mixed with RESOLVE® SG to increase the broadleaf weed spectrum, select adjuvants based on the adjuvant limitations of the other companion herbicide.

Other than the exceptions noted, and in addition to the tank mix partners and rates indicated in this label, RESOLVE® SG may be tank mixed or followed with sequential applications of other products registered for use in soybeans. RESOLVE® SG may be applied in tank mix combinations with full or reduced rates of other products provided:

- The tank mix product is labeled for the same timing, method of application, adjuvants, and use restrictions as RESOLVE® SG
- The tank mix is not specifically prohibited on the label of the tank mix product.
- The tank mix combination is compatible as determined by a "jar test" described in the TANK MIX COMPATIBILITY TESTING section below.
- Weed control and crop safety resulting from the use of tank mixtures not specifically noted on this label, or in separately published DuPont recommendations, are the responsibility of the user.

When applied as directed to OPTIMUM® GAT® corn and OPTIMUM® GAT® soybeans at rate of 0.5 to 4.0 oz per acre, RESOLVE® SG will control annual grass and broadleaf weeds including those listed in the following table:

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WEEDS CONTROLLED -

Preemergence

Grasses

Barnyardgrass

Bluegrass, annual*

Crabgrass, large*

Foxtail (bristly, giant, green, yellow)

Panicum, fall*

Signalgrass, broadleaf*

Wheat, Volunteer

Wild Oat*

* partial control/suppression

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*

Postemergence

Grasses (1 - 2")

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*

* partial control/suppression

Broadleaves (1 - 3")

Alfalfa, volunteer^

Canada thistle*

Chickweed, common

Cocklebur*

Dandelion (6" diameter)

Henbit

Kochia

Lambsquarters, common*

Morningglory, ivyleaf*

Mustard, (birdsrape, black, wild)

Nightshade, hairy*

Pigweed, (prostrate, redroot, smooth)

Purslane, common*

Ragweed, common*

Shepherd's purse

Smartweed, Pennsylvania*

Wild radish

Velvetleaf*

*partial control/suppression

^ Except in California

SPRAY ADJUVANTS

Applications of RESOLVE® SG must include a crop oil concentrate or nonionic surfactant except as specified in this labeling. An ammonium nitrogen fertilizer may also be required. If another herbicide is tank mixed with RESOLVE® SG, select adjuvants authorized for use with both products. Adjuvants must contain only EPA-exempt ingredients (40 CFR 1001).

Nonionic Surfactant

- A dd a nonionic surfactant at the rate of 2 pt per 100 gal of spray solution (0.25% v/v).
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

Crop Oil Concentrate

For improved weed control under hot, dry conditions, or for control of tough weeds like giant ragweed, a crop oil concentrate may be used in place of a nonionic surfactant.

Apply crop oil concentrate at the rate of 1 gal per 100 gal of spray solution (1.0% v/v).

 Use a good-quality, petroleum-based or methy lated seed oilbased crop oil concentrate with at least 15% surfactant emulsifiers and 80% oil.

Ammonium Nitrogen Fertilizer

In addition to a nonionic surfactant or crop oil concentrate, an ammonium nitrogen fertilizer is required to control velvetleaf.

- 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).
- Use 4 qt/acre UAN or 4 lb/acre AMS under arid conditions.
- Always use the lower rates of fertilizer with spray volumes of less than 15 gallons per acre.

^{*} partial control/suppression

Special Adjuvant Types

- Combination adjuvant products may be used at doses that provide the required amount of NIS, COC, MSO and/or ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions.
- In addition to the adjuvants specified above, other adjuvant types may be used if they provide the same functionality and have been evaluated and approved by DuPont Product Management. Consult separate DuPont technical bulletins for detailed information before using adjuvant types not specified on this label.

Adjuvants for Tank Mixtures with Glyphosate Products

When tank mixing RESOLVE® SG + glyphosate herbicides, it is recommended to add 4.25 -17 lb ammonium sulfate per 100 gallons of spray mixture.

- The addition of surfactant at 0.25% v/v (1 qt per 100 gallons of spray) to some RESOLVE® SG + glyphosate tank mixes may improve weed control. Since some glyphosate products differ in their adjuvant contents, some glyphosate products, such as "Glyphomax" or "Roundup Original" allow for the addition of surfactants.
- See the glyphosate manufacturer's label for specific ammonium sulfate and surfactant recommendation.

TANK MIX COMPATABILITY TESTING

Perform a jar test prior to tank mixing to ensure compatibility of RESOLVE® SG and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, gels, oily film or layers, or other precipitates, it is not compatible.

ROTATIONAL CROP GUIDELINES

The following rotational intervals should be observed when using RESOLVE® SG:

1 OZ MAXIMUM USE RATE

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Rotation Crop	Interval (months)
Corn, field	Anytime
OPTIMUM® GAT® com,	Anytime
OPTIMUM® GAT® soybeans	Anytime
Potatoes	Anytime
STS soybeans***	1
Tomato	1
Cereals, Winter (wheat)	4
Cereals, Spring (wheat, oats, barley)	9
Alfalfa*†	10
Cotton†	10
Canolat	10
Cucumber`	10
Flax	10
Peas	10
Rice **	10
Red Clover†	10
Sorghum†	10
Corn, pop or sweet	10

Soybeans	10
Snap beans, dry beans	10
Sunflower	10
Sugarbeets†	10
Crops Not Listed	18

* On sprinkler irrigated fields in Idaho, Utah, and Northern Nevada it is best to use deep fall tillage such as plowing prior to planting alfalfa. Product degradation may be less on furrow irrigated soils and may result in some crop injury.

† 18 months in the Red River Valley region of ND and MN. In all other areas, the rotation intervals should be extended to 18 months if drought conditions prevail after application and before the rotational crop is planted, unless sprinkler irrigation has been applied and totals greater than 15" during the growing season.

**For soils with pH less than 6.5.

***Sulfonylurea Tolerant Soybean

2 OZ MAXIMUM USE RATE

Interval (months)
Anytime
Anytime
Anytime
Anytime
1
4
4
9
10
10
10
10
10
10
10
18

†The rotation interval should be extended to 18 months if drought conditions prevail after application and before the rotational crop is planted, unless sprinkler irrigation has been applied and totals greater than 15" during the growing season.

***Sulfonylurea Tolerant Soybean

Greater than 2 OZ MAXIMUM USE RATE

OPTIMUM® GAT® corn or soybeans may be planted anytime. All other crops may be planted after 18 months.

IMPORTANT

BEFORE USING RESOLVE® SG, READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA-REGISTERED LABEL.

This bulletin contains new or supplemental instructions for use of this product which do not appear on the EPA- registered package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide 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.

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"Roundup" is a registered trademark of Monsanto Technology LLC.

"Glyphomax" is a registered trademark of DowAgroSciences LLC.

"OPTIMUM® and GAT® are registered trademarks of Pioneer Hi-Bred International, Inc.

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