

352-756

11/14/2007

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505C)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

352-756

Date of Issuance:

NOV 14 2007

NOTICE OF PESTICIDE:

Registration  
 Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

DuPont Envive Herbicide

Name and Address of Registrant (include ZIP Code):

E.I. DuPont de Nemours and Company  
DuPont Crop Protection  
Stine-Haskell Research Center  
P. O. Box 30  
Newark, DE 19714

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit the results of the one year storage stability (830.6317) and corrosion characteristics (830.6320) studies once they are available.
2. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
3. Make the labeling changes listed below before you release the product for shipment:

Signature of Approving Official:

*James A. Tompkins*  
James A. Tompkins, Product Manager (25)  
Herbicide Branch, Registration Division (7505P)

Date:

11/14/07

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- a. Add the phrase "EPA Registration No. 352-756"
  - b. Delete the sentence "Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using the toilet" from the Precautionary Statements. This statement appears in the User Safety Recommendations box.
  - c. Delete the sentences "May irritate eyes, nose, throat, and skin. Get medical attention if irritation persists" from the Precautionary Statements. This language is no longer used on EPA approved labels.
  - d. Delete the first paragraph of the Environmental Hazards section. Most of this language appears in paragraph 2 of your Environmental Hazards section.
  - e. Revise the last sentence of the second paragraph in your Environmental Hazards section to read "Do not contaminate water when **cleaning equipment or** disposing of equipment washwaters."
4. Submit one (1) copy of your final printed label 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 section 6 (e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Enclosure



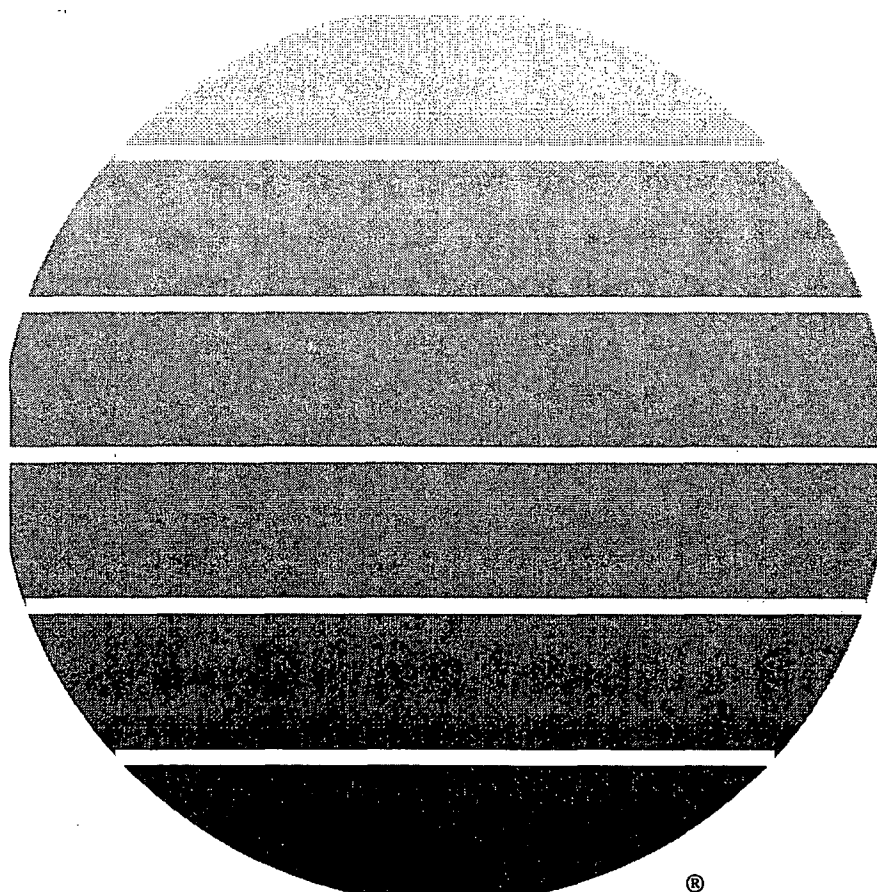
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# DuPont™ Envive™

herbicide

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## DRAFT LABEL



*“..... A Growing Partnership With Nature”*

## DUPONT™ ENVIVE™ HIGHLIGHTS

- ENVIVE™ herbicide is a dispersible granule formulation to be mixed with water and sprayed for selective burndown and residual weed control in soybeans.
- When ENVIVE™ is applied according to instructions on this label, it will control many broadleaf weeds and provide partial control of nutsedge and annual grasses.
- ENVIVE™ has two modes of action and rapidly inhibits the growth of susceptible weed species.
- ENVIVE™ may be applied in tank mixes with full or reduced rates of other products labeled for use in soybeans.
- ENVIVE™ may be followed sequentially by many postemergence herbicides, such as glyphosate, DuPont™ SYNCHRONY® XP, DuPont™ CLASSIC®, DuPont™ ASSURE® II, or "Flexstar".
- ENVIVE™ may be applied by ground or by air.
- Certain crop rotation and pH restrictions apply. Refer to 'Geographic Use Regions' and the 'Rotational Intervals' Table.
- Consult label text for complete instructions. Always read and follow label directions for use.

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# DuPont™

# Envive™

## herbicide

*Dispersible Granules*

**Active Ingredients** **By Weight**

Chlorimuron ethyl	
Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate	9.2%

Flumioxazin	
2-[7-fluor-3,4-dihydro-3oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione	29.2%

Thifensulfuron methyl	
Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate	100.0%

**Inert Ingredients** **In EPA Letter Docket**

**TOTAL** **100.0%**

EPA Reg. No. 352-XXX      Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 352-756

EPA Est. No. \_\_\_\_\_

Net Contents: \_\_\_\_\_

NOV 14 2007

### KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

#### FIRST AID

**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 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 INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:** Call 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.

**For medical emergencies involving this product, call toll free 1-800-441-3637.**

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION!** Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse. May irritate eyes, nose, throat and skin. Get medical attention if irritation persists.

### PERSONAL PROTECTIVE EQUIPMENT

Some of the material that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistant category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants.
- Chemical resistant gloves made of any water proof material such as polyethylene or polyvinylchloride.
- Shoes plus socks.

Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**Important:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "Applicators and Other Handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash thoroughly with soap and water after handling and 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.

## ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Do not apply where/when conditions favor runoff.

This product is toxic to non-target plants and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

This pesticide is toxic to plants and should be used strictly in accordance with the drift and run off precautions on this label in order to minimize off site exposures.

Under some conditions this product may have a potential to run off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, such as no till, limited till and contour plowing; these methods also reduce pesticide run off. Use of vegetation filter strips along rivers, creeks, streams, wetlands or on the downhill side of fields where run off could occur will minimize water run off and recommended.

## PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Ensure that all operation employees accurately measure pesticides.
- Mix only enough product for the job at hand.
- Avoid overfilling of spray tank.
- Do not discharge excess material on the soil at a single spot in the field or mixing/loading station.
- Dilute and agitate excess solution and apply at labeled rates or uses.
- Avoid storage of pesticides near well sites.
- When triple-rinsing the pesticide container, be sure to add the rinsate to the spray mix.

## IMPORTANT

Injury to or loss of desirable trees or vegetation may result from failure to observe the following: Do not apply or drain or flush equipment on or near desirable trees or other plants, or on 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 of spray to desirable plants. Do not contaminate any body of water. Keep from contact with fertilizers, insecticides, fungicides and seeds during storage. Do not mix/load, or use within 50

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feet of all wells included abandoned wells, drainage wells, and sink holes.

**Prior to using DuPont™ ENVIVE™ herbicide, consideration should be given to crop rotation plans.** Crops other than soybeans may be extremely sensitive to low concentrations of ENVIVE™ remaining in the soil the next planting season. Choice of rotation crop is restricted following application of ENVIVE™. (See "ROTATIONAL CROP GUIDELINES" for your geographical region.)

Thoroughly clean ENVIVE™ from application equipment immediately after use and prior to spraying crops other than soybeans. Failure to remove even small amounts of ENVIVE™ from application equipment may result in injury to subsequently sprayed crops.

## DIRECTIONS FOR USE

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

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.

ENVIVE™ herbicide should be used only in accordance with recommendations on this label or in separately published DuPont recommendations. DuPont will not be responsible for losses or damage resulting from the use of this product in any manner not specifically recommended by DuPont.

**READ ENTIRE LABEL AND PAMPHLET. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

## 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 12 hours. 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.

Chemical resistant gloves made of any water proof material such as polyethylene or polyvinylchloride. Shoes plus socks.

## FOR USE ON SOYBEANS ONLY

Do not apply this product through any type of irrigation system.

Do not graze treated fields or harvest for forage or hay.

Low pressure and high volume hand wand equipment is prohibited.

Do not irrigate when soybeans are cracking.

**Single Application:** Do not apply a full rate of DuPont™ ENVIVETM more than once per soybean cropping cycle.

**Split Application:** Two applications totaling the fully labeled ENVIVETM rate may be made per soybean cropping cycle. Do not exceed the full labeled rate for the geography.

## GENERAL INFORMATION

ENVIVETM herbicide is a dispersible granule formulation to be mixed with water and sprayed for selective burndown and residual weed control in soybeans. When applied according to the instructions on this label, it will control many broadleaf weeds and provide partial control of nutsedge and annual grasses.

Crop injury may occur from applications made to poorly drained soils under cool, wet conditions. Risk of crop injury can be minimized by not using on poorly drained soils, planting at least 1.5 inches deep and completely covering seeds with soil prior to preemergence applications.

Residual applications of ENVIVETM require rainfall or sprinkler irrigation to activate the herbicide. Degree of control and duration of effect depend on: rate used, weed spectrum, growing conditions at and following time of treatment, soil pH, texture, organic matter, moisture and precipitation.

Best residual control is obtained if ENVIVETM is applied to moist soil and followed by rainfall or irrigation (~1") before weeds germinate. Several small rainfalls of less than 1/4" each are not as beneficial as one large rainfall of 1/2-1". On dry soil, more moisture is required for activation (1-2") before weed emergence. If moisture is insufficient to activate the herbicide, a rotary hoeing or shallow cultivation should be made after emergence of the crop while weeds are small enough to be controlled by mechanical means. Deep cultivation reduces the effectiveness of ENVIVETM and should be avoided.

Excessive rainfall received in a short period of time following the emergence of soybeans treated with a preplant or preemergence application of ENVIVETM herbicide may cause minor leaf burn and/or defoliation of some lower leaves due to splashing of the herbicide onto the soybean plants. These symptoms will gradually dissipate over time and will not impact the late season growth and vigor of the soybean crop.

## BIOLOGICAL ACTIVITY

ENVIVETM has two modes of action and rapidly inhibits the growth of susceptible weed species. Following application of preplant or preemergence treatment, susceptible weeds may germinate and emerge, but growth then ceases and

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leaves become yellow and/or brown by 3-5 days after emergence. Death of leaf tissue and growing point will follow in some species while others will remain green but stunted and noncompetitive. Following a burndown application, growth of susceptible weeds ceases followed by tissue yellowing and browning and death of the growing point. ENVIVETM provides partial control of some annual grasses when used preplant or preemergence but other products may be needed to ensure adequate grass control.

## APPLICATION INFORMATION - ALL USES

- ENVIVETM herbicide is a dispersible granule formulation which readily disperses in water.
- ENVIVETM may be used in conventional, no-till, or conservation tillage soybean production.
- ENVIVETM may be used at various rates and by various use methods depending on geographical location in the use regions Central and Southern.

### Geographic Use Regions

The geographical use regions for ENVIVETM are defined below:

**Central Region:** The states of Delaware, Illinois, Indiana, Iowa (fields east of State Route 63 or south of I-80), Kansas, Maryland, Michigan, Missouri (except the Bootheel), Nebraska (fields south of Route 30 and east of Route 281), New Jersey, New York (fields south of I-90), Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin (fields south of I-90 between Lacrosse and Madison and fields south of I-94 between Madison and Milwaukee).

- On soils with a composite pH greater than 7.0, do not exceed 2.5 oz/acre ENVIVETM.
- In the states of Michigan, New York, and Wisconsin, do not use ENVIVETM on soils where the composite pH exceeds 7.6.
- In the states of New York and Wisconsin, do not exceed 2.5 oz/acre per season.

ENVIVETM may be used on fields which are composite pH 7.0 or less, but which may contain isolated areas where the pH exceeds 7.0. Use of ENVIVETM at rates exceeding 2.5 oz/acre on soils which exceed composite pH 7.0 may result in unacceptable injury to the following crop.

**Southern Region:** The states of Alabama (except the "Black Belt" where soil pH must be less than 7.0), Arkansas, Florida, Georgia, Kentucky, Louisiana, Missouri (Bootheel region only), Mississippi (except the "Black Belt" where soil pH must be less than 7.0), North Carolina, Oklahoma, South Carolina, Tennessee and Texas (fields east of Route 183).

- On soils with a composite pH greater than 7.0 do not exceed 4 oz/acre ENVIVETM.

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- Do not apply to Black Belt Soils of Alabama and Mississippi with a soil pH greater than 7.0 or history of nutrient deficiency such as iron chlorosis, as injury may occur.
- Injury to soybeans may occur if DuPont™ ENVIVE™ is used on soils having a calcareous surface layer or pH greater than 7.5.

**Application Methods**

- Fall-applied, early pre-plant, pre-plant and preemergence, including burndown.
- ENVIVE™ may be followed sequentially by many postemergence herbicides, such as glyphosate, DuPont™ SYNCHRONY® XP, DuPont™ ASSURE® II, or "Flexstar".
- Spring-applied ENVIVE™ may follow fall applications of DuPont™ CANOPY® EX, SYNCHRONY® XP, DuPont™ EXPRESS® XP or EXPRESS® TOTALSOL®.
- For sequential programs using chlorimuron ethyl-containing herbicides (ENVIVE™, CANOPY® EX, DuPont™ CLASSIC®, SYNCHRONY® XP and/or "Valor" XLT), do not exceed 0.82 oz ai/ac chlorimuron ethyl in the Central Region States or 1.28 oz ai/acre chlorimuron ethyl in the Southern Region States in any one soybean growing cycle.

**Timing To Crop Stage**

- After fall harvest, ENVIVE™ may be applied any time prior to 3 days after planting but before soybean emergence, except on frozen ground.
- Do not apply ENVIVE™ to cracking soybeans or after the soybean crop has emerged because severe injury or death of the crop will occur.

- **Do not apply ENVIVE™ to frozen or snow covered ground.**
- **Do not apply this product when weather conditions favor spray drift from treated areas.**

**Burndown Information**

Apply ENVIVE™ when weeds are young and actively growing. Applications made to weeds larger than the indicated sizes, or to weeds under stress, may result in unsatisfactory control.

When used for burndown, ENVIVE™ is rainfast after one hour.

- Use a minimum of 15 gallons per acre to ensure thorough coverage of the weeds and the best performance. For small weeds and/or heavy crop residue, increase the gallonage to ensure coverage.
- For best performance, select nozzle and pressure combinations that deliver medium spray droplets, as indicated, for example, by ASAE standard S572.
- Reduced residual weed control may occur when burndown applications are made to fields where heavy crop and/or weed residue exist.

**Spray Additives**

Applications of ENVIVE™ used for burndown must include either a crop oil concentrate or a nonionic surfactant. Crop oil concentrate is the required adjuvant system unless tank mixing with a product that does not allow use of crop oil concentrate.

Consult local DuPont fact sheets, technical bulletins, and service policies prior to using other adjuvant systems. If another herbicide is tank mixed with ENVIVE™, select adjuvants authorized for use with both products. Adjuvants must contain only EPA-exempt ingredients (40 CFR 1001).

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

- Apply at 1% v/v (1 gal per 100 gal spray solution) or 2% under arid conditions.
- 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) or 0.5% under arid conditions.
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

**Tank Mixes**

Do not apply ENVIVE™ within 14 days before or after an application of an organophosphate insecticide on any soybean variety that is not DuPont™ STS™ or STS™/RR, as severe crop injury may occur. ENVIVE™ can be applied in tank mixtures with organophosphate insecticides or at any time preceding or following an application of an organophosphate insecticide prior to emergence of any STS™ or STS™/RR soybean variety. Tank mixtures of ENVIVE™ plus organophosphate insecticides applied preplant or preemergence to STS™ or STS™/RR soybean varieties may result in minor transient crop response (i.e. stunting and/or chlorosis).

- **Do not use ENVIVE™ in soybeans in the same field where flufenacet ("Axiom", "Domain"), alachlor ("MicroTech"), metolachlor ("Dual" & DuPont™ CINCH® products or "Boundary") or dimethenamid ("Frontier" or "Outlook") have recently been applied or it may result in severe injury to soybeans when application is followed by prolonged periods of cool wet weather and should not be used with ENVIVE™ unless supplemental labeling, provided by DuPont, is followed.**

Other than chloroacetamide-containing products, ENVIVE™ may be tank mixed or followed with sequential applications of other products registered for use in soybeans. For additional preemergence broadleaf weed control, ENVIVE™ may be tank mixed with DuPont™ LINEX® 4L, metribuzin, or pendimethalin. For additional grass control, ENVIVE™



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may be tank mixed with pendimethalin or "Command". DuPont™ ENVIVE™ 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 ENVIVE™.
- 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.

To select the proper tankmix product, identify the weeds which need to be controlled and consult the product labels to determine which product is needed. Consult the companion tankmix herbicide label for use instructions, rates, precautions, restrictions, and other use information. For ENVIVE™ tankmixes with glyphosate substitute 0.25% NIS for the 1% COC.

2,4-D (LVE) is the isooctyl (2-ethylhexyl) ester of 2,4-Dichlorophenoxyacetic acid. This product is sold under a variety of trade names. It has a minimum preplant interval of 7-30 days based on the rate used. Consult the label of the product used for specific information on this interval.

**Tank Mix Compatibility Testing**

Perform a jar test prior to tank mixing to ensure compatibility of ENVIVE™ 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.

**FALL APPLICATIONS**

**Timing**

- ENVIVE™ can be applied to no-till or conservation fields anytime after the fall harvest, to provide residual weed control on fields that will be planted the following spring with soybeans.

For best results in the Central region, applications should be made no earlier than October 15, or when soil temperature falls below 50° F at a 2 inch depth to maintain residual weed control into the spring (May 1).

For best results in the Southern region, applications should be made no earlier than November 15, or when soil temperature falls below 50° F at a 2 inch depth to maintain residual weed control into the spring (April 1).

When used with a tank mix partner, refer to the tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, plant-back intervals and adjuvant recommendations.

**Timing to Weeds: Burndown**

For best results, apply to annual broadleaf weeds that are up to 3 inches in height or diameter and to perennial broadleaf weeds that are up to 6 inches in height or diameter. Where the rate is not restricted by soil pH, use higher ENVIVE™ rates for improved and longer residual activity.

**Rate Table 1 - Fall or Early Spring Use Rates by Region**

In medium and fine soils of 0.5 - 5% organic matter	Rate* oz/acre
<b>Central Region</b> Delaware, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Missouri (except the bootheel), Nebraska, New Jersey, New York, Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin	
no soil pH restriction	2.5
composite soil pH of 7 or less	> 2.5 - 5.3
<b>Southern Region</b> Alabama, Arkansas, Georgia, Kentucky, Louisiana, Missouri (bootheel region only), Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas (fields east of Rte 183)	
no soil pH restriction	2.5 - 4.0
composite soil pH of 7 or less	> 4.0 - 5.3
*see page 3, 'Geographic Use Regions', for state specific restrictions for Alabama, Iowa, Michigan, Mississippi, Missouri, Nebraska, New York, Texas, and Wisconsin.	

**Weeds Controlled - Burndown**

For the best burndown results, the addition of 2,4-D LVE is recommended, and is required for control of some weeds.

ENVIVE™ herbicide, applied at 2.5 - 5.3 oz/acre, will burndown the following weeds.

**Burndown Control of Emerged Winter Annual, Perennial, and Summer Annual Weeds**

- |                                  |  |
|----------------------------------|--|
| Bittercrass, smallflowered       | Pepperweed, Virginia                   |
| Bushy wallflower                 | Ragweed, redroot                       |
| Buttercup, smallflower           | Ragweed, common, giant                 |
| Butterweed (Cressleaf groundsel) | Shepherd's-purse                       |
| Cutleaf evening primrose*        | Smartweed, Pennsylvania                |
| Dandelion                        | Speedwell, field and purslane          |
| Deadnettle, purple               | Sunflower                              |
| Garlic, wild*                    | Thistle, Canada (above ground portion) |
| Henbit                           | Velvetleaf                             |
| Ladysthumb                       | Whitlowgrass                           |
| Lambsquarters*                   | Yellow rocket                          |
| Lettuce, prickly                 |  |
| Marestail (horseweed)*           |  |
| Mustard, tansy, wild             |  |
| Pennycress, field                |  |

\* The addition of at least 8 oz ai/acre 2,4-D LVE is required for all ENVIVE™ rates.

For adjuvant and gallonage requirements for burndown applications, refer to the 'Burndown Information', 'Spray Additives', and 'Tank Mixes' sections of this label under the 'Application Information - All Uses' section, page 3.

**Chickweed Burndown**

- For best results: add 0.08 - 0.25 oz ai/acre DuPont™ EXPRESS® XP or EXPRESS® TOTALSOL® herbicide to ENVIVE™ for control of up to 6 inch common chickweed. For heavy matted infestations, use the higher

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end of the rate range. For lighter infestations of non-matted chickweed, use the lower end of the rate range. For other weeds controlled by EXPRESS® XP or EXPRESS® TOTALSOL®, see the EXPRESS® XP or EXPRESS® TOTALSOL® labels. EXPRESS® XP and EXPRESS® TOTALSOL® must be added at least 7-14 days prior to soybean planting (see DuPont™ EXPRESS® XP or EXPRESS® TOTALSOL® label for specific plant back interval information).

- Alternatively, metribuzin or glyphosate-containing products registered for soybeans may be added for chickweed burndown.

**Restrictions & Limitations**

- Do not perform any tillage operations after fall applications or residual weed control will be reduced
- Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

**SPRING APPLICATIONS**

**Spring Application Rates**

To ensure uniform preemergence coverage, use 10 to 30 gals of spray solution per acre for conventional tillage application. Nozzle selection should met manufacturer's gallonage and pressure recommendation for preemergence herbicide application.

Giving careful consideration to soil type, soil pH, organic matter, rotational crop intervals, geographic location, and weed pressure, select a rate of DuPont™ ENVVIVE™ from Rate Table 2.

**Rate Table 2 - Pre-plant, Pre-plant Burndown and Preemergence:**

In medium and fine soils of 0.5 - 5% organic matter	Rate* oz/acre
<b>Central Region</b>	
Delaware, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Missouri (except the bootheel), Nebraska, New Jersey, New York, Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin	
no soil pH restriction	2.5
composite soil pH of 7 or less	> 2.5 - 5.3
<b>Southern Region</b>	
Alabama, Arkansas, Georgia, Kentucky, Louisiana, Missouri (bootheel region only), Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas (fields east of Rte 183)	
no soil pH restriction	2.5 - 4.0
composite soil pH of 7 or less	> 4.0 - 5.3
*see 'Geographic Use Regions', for state specific restrictions for Alabama, Iowa, Michigan, Mississippi, Missouri, Nebraska, New York, Texas, and Wisconsin.	

Apply ENVVIVE™ or ENVVIVE™ tankmixes using one of the following application methods.

- Early preplant or preplant in conservation tillage, no-till or stale seedbed systems.

- Preemergence application up to 3 days after planting but before soybean emergence. Applications after the soybeans emerge will result in severe crop injury.
- Sequential applications followed by planned postemergence treatments.

**Weeds Controlled - Spring (near planting) Applications**

When used as directed, ENVVIVE™ will provide residual control of the weeds listed in Table 1 & suppress the weeds listed in Table 2. This label makes no claims concerning the control of other weed species. Lower rates are recommended for planned sequential programs and higher rates are recommended for full-season programs. Application of ENVVIVE™ to soils with high organic matter and/or high clay content may require a higher rate than soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

In the Central region, do not use more than 2.5 oz / acre of ENVVIVE™ on soils with a composite pH of greater than 7.0. ENVVIVE™ at 2.5 oz / acre rate will provide suppression of the weeds listed in Table 1.

ENVVIVE™ rate for preemergence application, as well as when used as part of a burndown program, should be based upon soil characteristics and the most difficult-to-control weed species being targeted for preemergence control. See Tables 1 and 2.

For burndown of larger annual grasses or broadleaf weeds exceeding 1-3", or for burndown of weeds not listed above, ENVVIVE™ may be tankmixed with one or more of the following:

- ASSURE® II
- EXPRESS® XP or EXPRESS® TOTALSOL®
- dicamba
- glyphosate
- paraquat
- 2,4-D (LVE)

For adjuvant and gallonage requirements for burndown applications, refer to the 'Burndown Information', 'Spray Additives', and 'Tank Mixes' sections of this label under the 'Application Information - All Uses' section, page 3.

**For Season-long Grass Control**

ENVVIVE™ may be followed as needed by a postemergence grass herbicide such as DuPont™ ASSURE® II herbicide, or, in glyphosate tolerant soybeans, ENVVIVE™ may be followed with an in-season glyphosate application.

**PLANNED SEQUENTIAL PROGRAMS**

For season-long control in glyphosate-tolerant soybeans, follow ENVVIVE™ with an in-season glyphosate-containing herbicide. Where appropriate, and following guidance provided by labeling, add DuPont™ SYNCHRONY® XP or DuPont™ CLASSIC® to this in-season glyphosate application for enhanced broadleaf and sedge control.

For season-long control in conventional soybeans, follow ENVVIVE™ with sequential programs based on the targeted weeds.

Table 1. Broadleaf Weeds Controlled by Preemergence Application of DuPont™ ENVIVE™

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BROADLEAF WEED SPECIES				
SECTION A				
COMMON NAME	SCIENTIFIC NAME	ORGANIC MATTER	SOIL TYPE	ENVIVE™ RATES
Bittercress	<i>Cardamine hirsuta</i>	0.5 to 5%	All Soil Types	3.0 oz./A
Carpenterweed	<i>Mollugo verticillata</i>			
Chickweed				
Common Mouseear	<i>Stellaria media</i>			
Common Lambsquarters	<i>Cerastium vulgatum</i>			
Common Purslane	<i>Chenopodium album</i>			
Copperleaf	<i>Portulaca oleracea</i>			
Hophornbeam				
Virginia	<i>Acalypha ostryifolia</i>			
Dandelion	<i>Acalypha virginica</i>			
Eclipta	<i>Taraxacum officinale</i>			
Eveningprimrose, Cutleaf	<i>Eclipta prostrata</i>			
Florida Pusley	<i>Oenothera laciniata</i>			
Hairy Indigo	<i>Richardia scabra</i>			
Henbit	<i>Indigofera hirsuta</i>			
Kochia	<i>Lamium amplexicaule</i>			
Little Mallow	<i>Kochia scoparia</i>			
Marestail/Horseweed	<i>Malva parviflora</i>			
Mayweed	<i>Conyza canadensis</i>			
Mustard, Wild	<i>Matricaria recutita</i>			
Nightshades				
Black	<i>Brassica kaber</i>			
Eastern Black				
Hairy	<i>Solanum nigrum</i>			
Pigweeds	<i>Solanum ptycanthum</i>			
Redroot	<i>Solanum sarrachoides</i>			
Smooth				
Spiny Amaranth	<i>Amaranthus retroflexus</i>			
Tumble	<i>Amaranthus hybridus</i>			
Prickly Sida (Teaweed)	<i>Amaranthus spinosus</i>			
Puncturevine	<i>Amaranthus albus</i>			
Purple Deadnettle	<i>Sida spinosa</i>			
Redmaids	<i>Tribulus terrestris</i>			
Shepherd's-purse	<i>Lamium purpureum</i>			
Smallflower	<i>Calandrinia ciliata</i> var. <i>menziesii</i>			
Morningglory	<i>Capsella bursa-pastoris</i>			
Spotted Spurge				
Swinecress	<i>Jacquemontia tamnifolia</i>			
Venice Mallow	<i>Euphorbia maculata</i>			
	<i>Coronopus didymus</i>			
	<i>Hibiscus trionum</i>			

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<b>BROADLEAF WEED SPECIES</b>				
<b>SECTION B</b>				
<b>All weeds listed in section A plus</b>				
<b>COMMON NAME</b>	<b>SCIENTIFIC NAME</b>	<b>ORGANIC MATTER</b>	<b>SOIL TYPE</b>	<b>DUPONT™ ENVIVE™ RATES</b>
Cocklebur, Common Coffee Senna Florida Beggarweed Hemp Sesbania Jimsonweed Morningglories Entire leaf	<i>Xanthium strumarium</i> <i>Cassia occidentalis</i> <i>Desmodium tortuosum</i> <i>Sesbania exaltata</i> <i>Datura stramonium</i>	0.5 to 3%	All Soil Types	4.0 oz./A
Ivyleaf Pitted Tall	<i>Ipomoea hederacea</i> var. <i>integruscula</i> <i>Ipomoea hederacea</i> <i>Ipomoea lacunosa</i> <i>Ipomoea purpurea</i>			
Palmer Amaranth Ragweed Common Giant Sicklepod Smartweeds Ladysthumb Pennsylvania	<i>Amaranthus palmeri</i>  <i>Ambrosia artemisiifolia</i> <i>Ambrosia trifida</i> <i>Senna obtusifolia</i>	3 to 5%	Coarse and Medium Soils: (sandy loam, loamy sand, loamy, silt-loam, silt, sandy clay, sandy clay loam)	5.0 oz./A
Tropic Croton Sunflower, Common Velvetleaf Waterhemp Common Tall Wild Poinsettia	<i>Croton glandulosus</i> <i>Helianthus annuus</i> <i>Abutilon theophrasti</i>  <i>Amaranthus rudis</i> <i>Amaranthus tuberculatus</i> <i>Euphorbia heterophylla</i>			

**Table 2. Annual Grasses Suppressed by Preemergence Application of ENVIVE™**

<b>GRASS WEED SPECIES</b>	<b>ENVIVE™ RATES</b>
Signalgrass Crabgrass, Large Barnyardgrass Foxtails Giant Yellow Goosegrass Lovegrass, California Panicums Fall Texas	<i>Brachiaria platyphylla</i> <i>Digitaria sanguinalis</i> <i>Echinochloa crus-galli</i>  <i>Setaria faberi</i> <i>Setaria pumila</i> <i>Eleusine indica</i> <i>Eragrostis diffusa</i>  <i>Panicum dichotomiflorum</i> <i>Panicum texanum</i>
	3.0 to 5.0 oz./A

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To ensure maximal rotational flexibility when considering a sequential program of DuPont™ ENVIVE™ followed by other herbicides containing chlorimuron ethyl, such as DuPont™ CLASSIC® or DuPont™ SYNCHRONY® XP, carefully consider: the soil pH, the recommendations below, and the Rotational Crop Guidelines in this label.

**Applications of 2.5 oz/acre ENVIVE™ to soils with pH greater than 7:**

Do not apply additional chlorimuron-ethyl containing herbicides (such as CLASSIC® and SYNCHRONY® XP) except in the Southern region states of AL, AR, FL, GA, KY, LA, MO (bootheel), MS, NC, OK, SC, TN, and TX, where 0.375 oz/acre SYNCHRONY® XP, or up to 0.5 oz/acre CLASSIC® may be applied.

**Applications of 3.5 oz/acre ENVIVE™ to soils with pH greater than 7:**

Do not apply additional chlorimuron-ethyl containing herbicides (such as CLASSIC® and SYNCHRONY® XP).

**Applications of 2.5 - 5.3 oz/acre ENVIVE™ to soils with pH of 7 or less:**

A single postemergence application of either CLASSIC® or SYNCHRONY® XP may be applied up to 0.75 oz/acre.

Refer to the CLASSIC® and/or SYNCHRONY® XP herbicide labels for specific information regarding use rates, application timing, crop rotations, and other restrictions and precautions.

**ROTATIONAL GUIDELINES FOR FALL AND SPRING ENVIVE™ APPLICATIONS**

**Central Region:** The states of Delaware, Illinois, Indiana, Iowa (east of State Route 63 or south of I-80), Kansas, Maryland, Michigan, Missouri (except the Bootheel), Nebraska (fields south of Route 30 and east of Route 281), New Jersey, New York (fields south of Interstate 90), Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin (fields south of Interstate 90 between Lacrosse and Madison and fields south of Interstate 94 between Madison and Milwaukee).

**Southern Region:** The states of Alabama (except the "Black Belt" where soil pH must be less than 7.0), Arkansas, Florida, Georgia, Kentucky, Louisiana, Missouri (Bootheel region only), Mississippi (except the "Black Belt" where soil pH must be less than 7.0), North Carolina, Oklahoma, South Carolina, Tennessee and Texas (fields east of Route 183).

When used as described in the Central Region section of this label, or the Southern section of this label, the Rotational Interval Table describes the minimum length in months from the time of ENVIVE™ application until ENVIVE™ treated soil can be replanted to the crops listed in the table. For Fall applications, begin counting the recropping interval from the normal Spring planting time for soybeans in your area.

Crop rotation intervals noted below are based on crops grown under favorable growing conditions. Crops grown under unfavorable environmental conditions, such as drought, nutrient deficiency, high salts, disease and insect pressure may demonstrate reduced tolerance to crop protection chemicals. When deciding on a particular crop to

replant in your fields, carefully consider your particular soil and other field conditions. When a recommended tank mix is used, consult the tankmix partner labels for recropping instructions and follow the directions that are most restrictive.

**Rotational Guidelines**

*For all recommended Fall and Spring ENVIVE™ uses, including sequentials with DuPont™ CANOPY® EX, CLASSIC® or SYNCHRONY® XP*

ENVIVE™ Crop Rotational Interval in Months

Crop	Southern Region <sup>1</sup>		Central Region <sup>2</sup>
	Soil pH less than 7.0	Soil pH 7.0 or greater	All Soil pH
Soybean	Immediately	Immediately	Immediately
Barley, Ryegrass, Wheat, Winter Rye	4	4	4
Field Corn <sup>3</sup>	10	18	10
Cotton	10	30	10
Rice	9	10 <sup>4</sup>	10
Tobacco (Transplant)	10	18	10
Tomato (Transplant)	12	18	12
Alfalfa	12	18	12
Clover	12	18	18
Dry Bean, Kidney Bean, Pea, Snap Bean	12	30	12
Sorghum	10	18	10
Cabbage, Cucumbers, Flax, Lentils, Mustards, Peanuts, Pumpkin, Sunflower, Sweet Corn, Watermelon	18	30	18
Canola (Rapeseed), Carrot, Onion, Potato, Sugar Beet and any other crops not listed	18	30	30

<sup>1</sup> Southern Region includes the states of AL (except the "Black Belt" where soil pH must be less than 7.0), AR, FL, GA, KY, LA, MO (Bootheel region only), MS (except the "Black Belt" where soil pH must be less than 7.0), NC, OK, SC, TN and TX (fields east of Route 183).

<sup>2</sup> Central Region includes the states of DE, IA (east of State Route 63 or south of I-80), IL, IN, KS, MD, MI, MO (except Bootheel region), NE (fields south of Route 30 and east of Route 281), NJ, NY (fields south of Interstate 90), OH, PA, VA, WV, and Wisconsin (fields south of Interstate 90 between Lacrosse and Madison and fields south of Interstate 94 between Madison and Milwaukee).

<sup>3</sup> Field corn is defined to include only that corn grown for grain or silage, popcorn and seed corn. However, because seed corn inbred lines may vary in their sensitivity to trace amounts of herbicide carryover, DuPont cannot warrant that seed corn can be re-cropped without damage or yield loss. User should seek the advice of their seed corn company agronomist regarding inbred sensitivity to herbicides prior to planting any inbred lines.

<sup>4</sup> Rice may be replanted in soils with a pH greater than 7.0 at 10 months following an ENVIVE™ application of no more than 2.5 oz/acre as long as no other chlorimuron-ethyl containing products (eg CLASSIC®, SYNCHRONY® XP, etc.) were applied in the same season as ENVIVE™. In soils with a pH greater than 7.0 where an ENVIVE™ rate was >2.5 oz/acre or where 2.5 oz/acre ENVIVE™ was followed by an application of another chlorimuron-ethyl containing product, the recrop to rice is 18 months.

## APPLICATION EQUIPMENT

### SPRAY TANK PREPARATION

It is important that spray equipment is clean and free of existing pesticide deposits before using DuPont™ ENVIVE™. Follow the spray tank cleanout procedures specified on the label of product previously sprayed. If no cleanout procedure is provided, follow the cleanout procedure below for all application equipment.

1. Thoroughly rinse sprayer, tanks, boom, and hoses with clean water.
2. Partially fill the tank with water and add one of the cleaning agents listed in the SPRAYER CLEANUP section of this label. Complete filling the tank and flush the cleaning solution through the boom and hoses. Let stand for 15 minutes with agitation or recirculation and then drain the tank after flushing the hoses, boom, and nozzles.
3. Thoroughly rinse sprayer, tanks, boom, and hoses with clean water.
4. Follow label directions of the product previously sprayed for rinsate disposal.

Notes: During an extended period where spraying or mixing equipment will be used to apply multiple loads of ENVIVE™, at the end of each day of spraying partially fill the tank with fresh water, flush the boom and hoses and allow to sit overnight.

A steam cleaning of aerial spray tanks is recommended to dislodge any visible pesticide deposits.

### EQUIPMENT/ SPRAY VOLUMES

#### Ground Application, conventional tillage:

- Use a minimum of 10 gallons per acre to ensure uniform coverage of soil and the best performance.
- For best performance, select nozzle and pressure combinations that deliver coarse to very coarse spray droplets, as indicated, for example, by ASAE standard S572.

#### Ground Application, conservation tillage- burndown:

- Use a minimum of 15 gallons per acre to ensure thorough coverage of the weeds and the best performance. For small weeds and/or heavy crop residue, increase the gallonage to ensure coverage.
- For best performance, select nozzle and pressure combinations that deliver medium spray droplets, as indicated, for example, by ASAE standard S572.

**Aerial Application:** ENVIVE™ may be applied by air for early preplant or preemergence use on soybeans. Apply uniformly with properly calibrated aerial equipment. Use 5 to 10 gallons of water per acre. Higher gallonage applications generally afford more consistent weed control. Avoid overlapping. Continuous agitation of the spray tank is required to keep the material in suspension.

- Do not apply during a temperature inversion, when winds are gusty, or when other conditions could produce poor coverage and/or off-target spray movement.
- Do not apply spray when wind velocity is less than 2 mph or more than 10 mph.

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- Do not apply this product by air within 40 feet of nontarget plants including non-target crops.
  - Do not apply this product by air within 100 ft. of emerged cotton crops.
  - Do not apply this product by air within 40 feet of streams, wetlands, marshes, ponds, lakes and reservoirs.

### MIXING INSTRUCTIONS

Fill tank 1/4 full with water. Start agitation system, add ENVIVE™ and continue adding water. Add separately each additional component of any tank mix while adding water. Continue agitation throughout. If poor mixing should occur with any component, premix the component with two parts water before adding to the spray tank.

A fertilizer solution may be used in the spray mixture. Small quantities should be tested for compatibility by the following procedures before full-scale mixing.

1. Put 1 pint of fertilizer solution in a quart jar.
2. Mix 2 teaspoons ENVIVE™ with 2 tablespoons of water; mix thoroughly and add to fertilizer solution.
3. Close jar and shake well.
4. If other herbicides are to be used in the mixture, premix 2 teaspoons of wettable powder or 1 teaspoon of liquid with 2 tablespoons of water; add to ENVIVE™/fertilizer solution mixture.
5. Close jar and shake well.
6. Watch mixture for several seconds; check again in 30 minutes.
7. If mixture does not separate, foam, gel, or become lumpy, it may be used.
8. Mixing ability may be improved by adding compatibility agents.

Provided the above procedure shows the mixture to be compatible, prepare the tank mixture as follows: Add the fertilizer solution to the spray tank first, with the agitator running, add the required amount of ENVIVE™ and thoroughly mix. For tank mixtures with other herbicides, follow directions above. For tank mixtures with other herbicides, all applicable directions, restrictions and precautions for the additional herbicides are also to be followed.

Use ENVIVE™ spray preparations the same day as mixed or product degradation may occur. Thoroughly reagit and remix before using, if allowed to settle. When tank mixing with other herbicides, all applicable directions, restrictions and precautions for the additional herbicides are also to be followed.

### SPRAYER CLEANUP

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of ENVIVE™ as follows:\*

Spray equipment, including mixing vessels and nurse tanks, must be cleaned each day following ENVIVE™ application. After ENVIVE™ is applied, the following steps should be used to clean the spray equipment:

1. Drain tank; thoroughly hose down the interior surfaces of the tank; then flush tank, boom, and hoses with clean water for a minimum of 5 minutes.
2. Partially fill the tank with water and add one gallon of household ammonia\* (containing 3% active) for every 100 gallons of water. Complete filling the tank with water, then flush the cleaning solution through the boom, hoses, and nozzles. Add water to completely fill the tank and allow to agitate or recirculate for at least 15 minutes. Again, flush the boom, hoses and nozzles, and drain the tank.
3. Remove the nozzles and screens and clean separately in a bucket containing water and the cleaning agent.
4. Repeat Step 2.
5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the boom and hoses.

\*Equivalent amounts of an alternate strength ammonia solution or a tank cleaner recommended in separately published DuPont bulletins may be used.

### THE IMPORTANCE OF SOIL PH

Soil pH varies greatly, even within the same field. pH variations as much as 2 pH units are common. Composite soil samples taken across an entire field, such as those samples taken for soil fertility recommendations, may not detect areas of high pH. Sub-sampling is recommended for areas likely to have pH values higher than the field average. The following is a non-inclusive list of potential high pH areas where subsampling is recommended.

- Where different soil types are evident within a field, sample soil types separately.
- Where conditions vary within a field, sample areas separately, such as:
  - areas bordered by limestone gravel roads,
  - river bottoms subject to flooding,
  - low areas in hardpan soils where evaporative ponds may occur,
  - eroded hillsides,
  - along drain tile lines, and
  - areas where drainage ditch spoil has been spread.
- Where lime has not been deeply incorporated, soil may exhibit significantly higher pH values in the upper 3 inches of soil. Composite soil samples taken at a 6-8 inch depth may not reflect the elevated pH near the surface. In these cases shallow sampling, the upper 3 inches, is advised.

Determine soil pH by laboratory analysis using a 1:1 soil:water suspension.

### SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

**AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.**

#### IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 - 200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See **Wind, Temperature and Humidity**, and **Temperature Inversions** sections of this label.

#### Controlling Droplet Size - General Techniques

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

#### Controlling Droplet Size - Aircraft

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** - The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.
- **Application Height** - Application more than 10 ft above the canopy increases the potential for spray drift.

#### BOOM HEIGHT (GROUND)

Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

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## WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID GUSTY OR WINDLESS CONDITIONS.**

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

## TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## SENSITIVE AREAS

DuPont™ ENVIVE™ should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from sensitive areas).

## SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

## AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring.

**Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

## RESISTANCE MANAGEMENT

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

## INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

## IMPORTANT PRECAUTIONS

1. Because most crops are highly sensitive to ENVIVE™, all direct or indirect contact (such as spray drift) to crops or to land scheduled to be planted to crops other than soybeans should be avoided.
2. If a soybean variety is suspected of being sensitive to flumioxazin, check with the soybean seed company before treating a field of that soybean variety with ENVIVE™ (contains flumioxazin).
3. Soybean stunting may occur if excessive rainfall occurs after application but before soybeans germinate. Injury is more prevalent under poor drainage or compacted conditions or when soil is saturated for long periods of time. Soybeans rapidly outgrow stunting once favorable growing conditions return.



4. Seedling disease, nematodes, cold weather, deep planting (more than 2"), excessive moisture, high salt concentration, or drought may weaken soybean seedlings and increase possibility of crop injury.
5. Do not apply in land that has been or will be treated with metsulfuron and/or chlorsulfuron-containing herbicides in Nebraska and Kansas without observing the rotational crop intervals for those products.
6. Do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots, or injury to desirable trees and plants may occur
7. Do not use on lawns, walks, driveways, tennis courts or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water. Keep from contact with fertilizers, insecticides, fungicides and seeds during storage.
8. Thoroughly clean DuPont™ ENVIVE™ from application equipment immediately after use and prior to spraying crops other than soybeans. Failure to remove even small amounts of ENVIVE™ from application equipment may result in injury to subsequently sprayed crops.
9. Do not apply ENVIVE™ within 14 days before or after an application of an organophosphate insecticide on any soybean variety that is not DuPont™ STS™ or STS™/RR, as severe crop injury may occur. ENVIVE™ can be applied in tank mixtures with organophosphate insecticides or at any time preceding or following an application of an organophosphate insecticide prior to emergence of any STS™ or STS™/RR soybean variety. Tank mixtures of ENVIVE™ plus organophosphate insecticides applied preplant or preemergence to STS™ or STS™/RR soybean varieties may result in minor transient crop response (i.e. stunting and/or chlorosis).

### STORAGE AND DISPOSAL

**Pesticide Storage:** Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Store in a cool, dry place.

**Product Disposal:** Do not contaminate water, food, or feed by disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal: For Plastic Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. **For Fiber Sacks:** Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by State and local authorities. **For Fiber Drums With Liners:** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner. **For Bags Containing Water Soluble Packets:** Do not reuse the outer box or the resealable plastic bag. When all water-soluble packets are used, the outer packaging should be clean and may be disposed of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by open burning. If burned, stay out of smoke. If the resealable plastic bag contacts the formulated product in any way, the bag must be triple-rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer wrap as described above. **For Metal Containers (non aerosol):** Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. **For Paper and Plastic Bags:** Completely empty bag into application equipment. Then 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.

**Container Refilling and Disposal (For Containers up to 250 gal):** This is a refillable container. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than DuPont™ ENVIVE™. Reseal and return the container to any authorized DuPont refilling facility. If the container is not to be refilled, triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., 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 1-800-441-3637 day or night.

**Container Disposal for Bulk Containers:** When this container is empty, replace the cap and seal all openings that have been opened during use, and return the container to the point of purchase or to a designated location named at time of purchase of this product. The container must only be refilled with this pesticide product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact DuPont at 1-800-441-3637. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

For minor spills, leaks, etc., 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 1-800-441-3637 day or night.

**LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read this 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.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of DuPont. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. **WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.**

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

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To the extent consistent with applicable law that allows such requirement, DuPont or its Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify DuPont or a DuPont Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

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**For product information call: 1-888-6-DUPONT**  
**Internet address: <http://cropprotection.dupont.com/>**

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