20/2011



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

> OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

> > APR 2 0 2010

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

Subject: Label Amendment (container disposal) DuPont Canopy Herbicide EPA Reg. No. 352-444 Application Dated March 26, 2010

Dear Mr. Ambrose:

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

- 1. Change the heading from "Inert Ingredients" to "Other Ingredients".
- 2. Change the heading to "PERSONAL PROTECTIVE EQUIPMENT (PPE)".
- 3. Change the PPE phrase to "If no such instructions for washables exist,"
- 4. Change the User Safety Recommendations statement to "Remove clothing/**PPE** immediately if pesticide gets inside."
- 5. Change the Environmental Hazards phrase to "equipment washwaters or rinsate."
- 6. Throughout the label, change the heading from "GENERAL INFORMATION" to "**PRODUCT INFORMATION**".
- 7. It is suggested that the resistance-management grouping symbols be placed on the front panel of the label as described in PR Notice 2001-5.
- 8. On page 2, change the text to read "CANOPY herbicide **must** be used only in accordance with **instructions** on this label or in separately published DuPont **instructions**."
- On page 12, change the heading from "IMPORTANT PRECAUTIONS" to "RESTRICTIONS AND PRECAUTIONS". It is suggested that the advisory precautions be distinguished from the mandatory restrictions by placing them under separate subsections.

Page 1 of 2

#### Page 2 of 2 EPA Reg. No. 352-444

10. Change the Pesticide Disposal statement to read "Wastes resulting from the use of this product **must** be disposed of on site or at an approved waste disposal facility."

A stamped copy of your label is enclosed for your records. This label supercedes all previously accepted labels. 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,

Mundy moden for

Jim Tompkins Product Manager 25 Herbicide Branch Registration Division (7505P)





# DuPont<sup>TM</sup> Canopy<sup>®</sup> herbicide

# DRAFT LABEL

# 40918

#### DUPONT<sup>™</sup> CANOPY® HIGHLIGHTS

- CANOPY® is a soybean herbicide with two modes of action, which will deliver consistent burndown of winter annuals, even under cool, wet conditions.
- CANOPY® maximizes early season residual control of tough weeds, allowing an in-crop glyphosate application to be made closer to crop canopy.
- CANOPY® rapidly inhibits the growth of susceptible weeds.
- CANOPY® may be tank mixed with many other products for increased weed control.
- CANOPY® may be applied as a burndown for control of early emerged weeds.
- Following a burndown application, growth of susceptible weeds ceases, followed by tissue yellowing, browning, and death of the growing point.
- Include a spray additive recommended in the burndown sections of this label.
- CANOPY® may be applied by ground (broadcast or band) or by air.
- Certain crop rotation and pH restrictions apply. Refer to 'Geographic Use Regions' and 'Rotational Crop Guidelines' 1 or 2'.
- Consult label text for complete instructions. Always read and follow label directions for use.

#### **Table of Contents**

Precautionary Statements 1
Directions for Use 2
General Information
Biological Activity 2
Application Information - All Uses
Geographic Use Regions
Application Methods
Timing to Crop Stage
Burndown Information
Spray Additives
Tank Mixes4
Fall Applications4
Timing
Timing to Weeds: Burndown4
Rate Table 1
Weeds controlled - Burndown
Weeds controlled - Preemeergence
Spring Applications
Applications Methods
Weeds Controlled Preemergence
Central Region States - Specific Use Directions 5
Early Pre-plant, Pre-plant Incorporated, Preemergence: Rate Table 2
CANOPY® Reduced Rate tankmixes with metribuzin and LINEX® 4L, Rate Table 3 6
Sequential Applications, Rate Table 4
Rotational Crop Guidelines 1
Southern Region States - Specific Use Directions 7
Early Pre-plant, Preplant Incorporated,
Preemergence: Rate Table 5
Use in Stale Seedbed Production
Sequential Applications, Rate Table 6       8         Rotational Crop Guidelines 2       8
1
Application Equipment
Spray Tank Preparation
-1
Ground Application
Aerial Application
Mixing Instructions
Sprayer Cleanup
The Importance of Soil pH
Spray Drift Management
Resistance Management
Important Precautions
Storage and Disposal 12
Notice of Warranty 14





Under the Federal Insecticide, Fungicide, and Rodenticide Act Dupont TMas amended, for the pesticide registered under EPA Reg. No.

352-444

# Canop

# herbicide

**Dispersible Granules** 

By Weight

**Active Ingredients** 

75.0%

Metribuzin 4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one 64.3%

Chlorimuron Ethyl Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]

10.7%

EPA Est. No.

Inert Ingredients

100.0%

25.0%

EPA Reg. No. 352-444

sulfonyl]benzoate

Nonrefillable Container

Net:

TOTAL

OR

**Refillable Container** 

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

## **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 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 a poison control center or doctor. IF ON SKIN: 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. 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.

Have the product container or label with you when calling a poison control center or doctor

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

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye irritation. Avoid breathing dust, vapor or spray mist. Avoid contact with skin, eye or clothing.

In case of contact with eyes, immediately flush with plenty of water. 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 chemicalresistant 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.

#### 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.

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

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

Metribuzin is a chemical which can travel (seep or leach) through soil and can contaminate groundwater which may be used as drinking water. Metribuzin has been found in groundwater as a result of agricultural use. Users are advised not to apply metribuzin where the water table (groundwater) is close to the surface and where the soils are very permeable, i.e., well drained soils such as loamy sands. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

#### **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.

CANOPY® 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.

#### 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.

**Single Application:** Do not apply a full rate of CANOPY® more than once per soybean cropping cycle.

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

#### **GENERAL INFORMATION**

CANOPY® 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.

Residual applications of CANOPY® 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 DuPont<sup>TM</sup> CANOPY® 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.

#### **BIOLOGICAL ACTIVITY**

CANOPY® rapidly inhibits the growth of susceptible weeds. Following application of preplant incorporation or preemergence treatment, susceptible weeds may germinate and emerge, but growth then ceases and leaves become yellow 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. CANOPY® 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

#### **Geographic Use Regions**

The geographical use regions for CANOPY® 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 2.25 oz/acre CANOPY®.
In the states of Michigan, New York, and Wisconsin, do not use the 2.25 oz/acre rate on soils where the composite pH exceeds 7.6.
In the states of New York and Wisconsin, do not

exceed 2.25 oz/acre per season.

CANOPY® 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 CANOPY® at rates exceeding 2.25 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).

																										ot	
																					Ē						

- 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 CANOPY® 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.
- Pre-plant incorporated. Incorporate uniformly, no deeper than the top 1-2" of soil prior to planting soybeans.
- CANOPY® may be followed sequentially by many postemergence herbicides, such as glyphosate, DuPont<sup>™</sup> SYNCHRONY® XP, DuPont<sup>™</sup> ASSURE® II, or "Flexstar". See Rate Tables 4 and 6 for recommended sequential rates for CANOPY®.
- Spring-applied CANOPY® may follow fall applications of CANOPY® EX.
- For sequential programs using DuPont chlorimuron ethylcontaining herbicides (CANOPY®, CANOPY® EX, CLASSIC®, and/or SYNCHRONY® XP), do not exceed 0.82 ozai/ac chlorimuron ethyl in the Central Region States or 1.07 ozai/ac chlorimuron ethyl in the Southern Region States in any one soybean growing cycle.

#### **Timing To Crop Stage**

- After fall harvest, CANOPY® may be applied any time prior to soybean emergence, except on frozen ground.
- Do not apply CANOPY® after the soybean crop has emerged or severe injury or death of the crop will occur.

- Do not apply CANOPY® to frozen ground.

#### **Burndown Information**

Apply CANOPY® 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, CANOPY® 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.

#### **Spray Additives**

Applications of DuPont<sup>™</sup> CANOPY® 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 precludes 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 CANOPY®, 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**

Other than the exceptions noted, and in addition to the tank mix partners and rates indicated in this label, CANOPY® may be tank mixed or followed with sequential applications of other products registered for use in soybeans. CANOPY® 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 CANOPY®.
- 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 CANOPY® 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 Compatability Testing

Perform a jar test prior to tank mixing to ensure compatibility of CANOPY® 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

- CANOPY® can be applied to no-till or conservation fields anytime after the fall harvest.

#### 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. Annual grasses should not exceed 1 inch in height. Where the rate is not restricted by soil pH, use higher CANOPY® rates for improved and longer residual activity.

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

In medium and fine soils of 1.5 - 4% organic matter	Rate* oz/acre
Central Region 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	2.25
composite soil pH of 7 or less	3-7
Southern Region 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	2.25 to 3.5
composite soil pH of 7 or less	> 3.5-7
*see page 3, 'Geographic Use Regions', for sta restrictions for Alabama, Iowa, Michigan, Mis Missouri, Nebraska, New York, Texas, and Wis	sissippi,

#### 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.

CANOPY® herbicide, applied at 2.25 - 7 oz/acre, will burndown the following weeds.



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

Annual grasses Bittercress, smallflowered Bushy wallflower Buttercup, smallflower Butterweed (Cressleaf groundsel) Dandelion Deadnettle, purple Garlic, wild\* Henbit Ladysthumb Lambsquarters\* Lettuce, prickly Marestail (horseweed)\* Mustard, tansy, wild

Pepperweed, Virginia Pigweed, redroot Ragweed, common, giant Shepherd's-purse Smartweed, Pennsylvania Speedwell, field and purslane Sunflower Thistle, Canada (above ground portion) Velvetleaf Whitlowgrass Yellow rocket

- Pennycress, field
- \* Addition of 8 ozai/acre 2,4-D LVE is required for all DuPont<sup>™</sup> CANOPY® 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 0.1-0.33 oz DuPont<sup>™</sup> EXPRESS® XP herbicide to CANOPY® for control of up to 6 inch common chickweed. For heavy matted infestations, use the higher end of the rate range. For lighter infestations of non-matted chickweed, use the lower end of the rate range. For other weeds EXPRESS® XP controls, see the EXPRESS® XP label. EXPRESS® XP must be added at least 45 days prior to soybean planting.
- Alternatively, metribuzin or glyphosate-containing products registered for soybeans may be added for chickweed burndown.

#### Weeds Controlled - Preemergence

Fall through early Spring applications of 2.25 oz/acre CANOPY® will provide limited residual control of listed weeds to contribute to a clean seedbed at normal planting times.

Fall through early Spring applications of 3-7 oz/acre CANOPY® will provide acceptable preemergence control, or partial control (suppression), of the following weeds through normal planting dates.

#### Weeds Controlled or Suppressed Preemergence

Control Cocklebur Ladysthumb Lambsquarters Henbit Marestail Pigweed, redroot and smooth Purslane speedwell Ragweed, common Smartweed, Pennsylvania Winter annual mustards (pennycress, bittercress shepherd's-purse,

Suppression Annual grasses\* (foxtails, barnyardgrass, crabgrass, panicum) Chickweed, common Jimsonweed Morningglory, annual\* Nutsedge, yellow\* Prickly sida (teaweed)\* Ragweed, giant\* Velvetleaf

- whitlowgrass, yellow rocket)
- \* With 2.25 oz/acre applications of CANOPY®, heavy weed pressure, delayed planting, or adverse environmental conditions may require additional burndown control measures at planting.

In addition to the weeds noted in the lists above, CANOPY® has activity on a range of other weeds. Consult DuPont Fact Sheets, technical bulletins, and service policies for information on other weeds controlled.

#### SPRING APPLICATIONS

#### **Application Methods**

Apply CANOPY® or CANOPY® tankmixes using one of the following application methods.

- Early preplant or preplant in conservation tillage, no-till or stale seedbed systems.
- Pre-plant incorporated (incorporate uniformly, no deeper than the top 1-2" of soil prior to planting soybeans).
- Premergence application.

- Sequential applications followed by planned postemergence treatments.

#### Weeds Controlled Preemergence

When used as directed, CANOPY® will provide residual control of the following weeds. Lower rates are recommended for planned sequential programs and higher rates are recommended for full-season programs. See the Rate Tables below.

*Cocklebur	Pigweed
Florida beggarweed	Palmer
Hemp sesbania	Redroot
Hophornbeam, copperleaf	Smooth
Jimsonweed	Spiny amaranth
Ladysthumb	Poinsettia (wild)
Lambsquarters	Prickly sida (teaweed)
Mustard, wild	Purslane, common
*Morningglory	Ragweed, common
Annual	*Ragweed, giant
Ivyleaf	*Sicklepod
Entireleaf	Smartweed, Pennsylvania
Pitted	Spotted spurge
Smallflower	Sunflower
Tall	Velvetleaf

\* Large-seeded weeds, germinating deep in the soil such as morningglory, sicklepod, cocklebur and giant ragweed or other weeds which may emerge at various times during the growing season may require a cultivation or a postemergence herbicide application for season-long control.

When used as directed CANOPY® will provide partial control of the following weeds:

Annual Grasses (Barnvardgrass. Broadleaf signalgrass, Crabgrass, Foxtail species, Panicum, Texas and Fall) Burcucumber Chickweed, common Johnsongrass (seedling) Mexicanweed Nutsedge, purple, yellow

#### **CENTRAL REGION STATES** Specific Use Directions

• Spring applications of CANOPY® may be applied at planting or up to 45 days before planting.

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

#### Rate Table 2 - Early Pre-plant, Pre-plant Burndown, Pre-plant Incorporated and Preemergence:

]	Broadcast Rate (Ounces per Acr							
Soil Texture	1/2 - 4% Organic Matter							
Coarse:								
Loamy sand, Sandy Loan	n 4-5							
Medium:								
Loam, Silt Loam,								
Silt, Sandy Clay Loam	5 - 6							
Fine:								
Silty clay loam,								
Clay Loam, Clay	5 - 7							
For Season-long G	rase Control							

#### For Season-long Grass Control - Central Region States

DuPont<sup>™</sup> CANOPY<sup>®</sup> may not provide season-long preemergence control of grasses. For improved grass control, CANOPY<sup>®</sup> may be:

- followed as needed by a postemergence grass herbicide such as DuPont<sup>™</sup> ASSURE® II herbicide, or, in glyphosate tolerant soybeans, CANOPY® may be followed with an inseason glyphosate application.
- tankmixed with other grass herbicides such as metolachlor, alachlor and pendimethalin.

#### Pre-plant Burndown - Central Region States

In addition to providing season-long preemergence control of certain broadleaf weeds and partial control of other broadleaf weeds and annual grasses, CANOPY® will provide burndown control of the following broadleaf weeds up to 3" in diameter or height and annual grasses up to 1".

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

\* addition of 8 ozai/ac 2,4-D LVE is required for all CANOPY® rates

## For Spring Burndown control, pick the appropriate rate from Rate Table 2, 3 or 4

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

ASSURE® II 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.

#### CANOPY® Tankmixes with Metribuzin or DuPont™ LINEX® 4L - Central Region States

CANOPY® may be applied at reduced rates when tankmixed with metribuzin, metribuzin-containing products, or LINEX® 4L. These tankmixes will generally provide season-long preemergence weed control for the weeds listed below. When used according to the directions in the previous section for Burndown control, these tankmixes will also provide Burndown control of the weeds claimed in the previous section.

Reduced rates of CANOPY® tankmixed with metribuzin, metribuzin-containing products, or LINEX® 4L will generally provide season-long preemergence control of the following weeds:

Ladysthumb Lambsquarters Mustard, wild Pigweeds: Palmer Redroot Smooth Spiny amaranth Ragweed, Common Smartweed, Pennsylvania Velvetleaf

CANOPY® + metribuzin or LINEX® 4L tankmixes will provide partial control (suppression) preemergence of the following weeds:

Cocklebur	Morningglories
Crabgrass	Entireleaf
Eastern black nightshade†	Ivyleaf
Foxtail species	Pitted
Jimsonweed	Tall
	Waterhemp†

†partially controlled when tank mixed with a minimum of 1 pint of LINEX  $\circledast 4L$ 

Choose a reduced rate of CANOPY® and a rate of metribuzin or LINEX® 4L from Rate Table 3 below.

#### Rate Table 3 - Reduced Rate CANOPY® Tankmixes with metribuzin or LINEX® 4L

**Broadcast Rate (per Acre)** 

Soil Texture	1/2 - 4% Organic Matter ANOPY® + metribuzin or LINEX® 4L								
Coarse:									
Loamy sand, Sandy Loam	2.25* - 4 oz	1.5 - 3 oz ai	1-1.5 pt						
Medium or Fine:									
Loam, Silt Loam, Silt									
Sandy Clay Loam,									
Silty Clay Loam									
Clay Loam, Clay * 2.25 oz/acre is the m		<u>3 - 4.5 oz ai</u> oil with composit	1-2 pt te pH greater						

\* 2.25 oz/acre is the maximum rate on soil with composite pH greater than 7.0.

#### **Sequential Applications - Central Region States**

Reduced rates of DuPont<sup>™</sup> CANOPY®, from 2.25 - 7 oz/acre, may be followed, as needed, by sequential applications of many postemergence herbicides such as, DuPont<sup>™</sup> CLASSIC®, DuPont<sup>™</sup> SYNCHRONY® XP, and DuPont<sup>™</sup> HARMONY® GT XP. Reduced rates of CANOPY® in Rate Table 4 below, will provide early-season residual control (of the weeds listed under "Weeds Controlled-Preemergence: Spring Applications", page 5) prior to the planned postemerge program.

#### Rate Table 4 - Sequential Applications: CANOPY® followed by Postemergence

	Sequential rate limits for							
CANOPY®	DuPont <sup>™</sup> CLASSIC® or							
Broadcast (oz/a)	DuPont <sup>™</sup> SYNCHRONY® XP, oz/acre							
2.25*	On soil with composite pH greater than 7.0, do not follow with any chlorimuron-ethyl containing herbicide (CLASSIC®, SYNCHRONY® XP)							
3-5	CLASSIC® or SYNCHRONY® XP up to .75 oz,							
6	CLASSIC® up to .66 oz, SYNCHRONY® XP up to .75 oz							
7.	CLASSIC <sup>®</sup> up to .25 oz,							

\* 2.25 oz/acre is the maximum rate on soil with composite pH greater than 7.0.

#### ROTATIONAL GUIDELINES FOR FALL AND SPRING CANOPY® APPLICATIONS - Central Region States

**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).

When used as described in the Central Region section of this label, Rotational Guideline 1 describes the minimum length in months from the time of CANOPY® application until CANOPY® treated soil can be replanted to the crops listed in the table. For Fall applications, begin counting the re-cropping 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 Guideline 1 - Central Region**

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

Стор	Recropping Interval in Months
Soybeans	Anytime
Barley, Ryegrass, Wheat, Winter Rye	4
Alfalfa	10
Cotton	10
Rice	10
Tobacco (transplant)	10
Tomato (transplant)	10
Field Corn*	10
Clover	12
Dry Beans, Kidney Beans, Snap Beans, P	eas 12
Sorghum	12
Cucumber, Flax, Peanuts, Pumpkin,	
Sunflower, Sweet Corn, Watermelon,	

Cabbage, Canola (rapeseed), Lentils, Mustard 18

Carrot, Onion, Potato, and Sugar Beets

,		Ų		
and any other	crop not lis	ted	30	

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 recropped without damage or yield loss. Users should seek the advice of their seed corn company agronomists regarding inbred sensitivity to herbicides prior to planting any inbred lines.

#### SOUTHERN REGION STATES - Specific Use Directions

Spring applications of CANOPY® may be applied at planting or up to 45 days prior to planting.

Giving careful consideration to soil type, soil pH, organic matter, rotational crop intervals, geographic location, and weed pressure, select a rate of CANOPY® from **Rate Table 5** below. Apply CANOPY® Early Preplant, Preplant Incorporated or Preemergence as directed in the 'Application Information - All Uses' section of this label.

#### Rate Table 5 - Early Pre-plant, Pre-plant, Preplant Incorporated and Preemergence

**Broadcast Rate (Ounces per Acre)** 

	Percent Organic Matter in Soil							
Soil Texture	1/2-3 %	3-5 %						
Coarse:								
Loamy sand, Sandy Loam	6	8						
Medium:								
Loam, Silt Loam *,								
Silt, Sandy Clay Loam	8	10 .						
Fine:								
Silty clay loam,								
Clay Loam, Clay	10	12						
* O								

#### \* On silt loam soils in TN and KY use 6-8 oz

#### For Season-long Grass Control

#### - Southern Region States

DuPont<sup>™</sup> CANOPY® may not provide season-long preemergence control of grasses. For improved grass control, CANOPY® may be:

- followed as needed by a postemergence grass herbicide such as DuPont<sup>™</sup> ASSURE® II herbicide, or, in glyphosate tolerant soybeans, CANOPY® may be followed with an inseason glyphosate application.
- Tank mixed with such herbicides as alachlor, metolachlor and pendimethalin.

#### Use in Stale Seedbed or Conservation Tillage -Southern Region States

For Burndown control of small annual grasses and broadleaf weeds, use 3-4 oz of CANOPY® and apply up to 45 days prior to planting. Select the higher rate for larger weeds. For burndown weeds controlled, see the "Pre-plant Burndown -Central Region States" section in this label.

When burndown plus residual control is desired, CANOPY® may be applied at-planting or up to 45 days prior to planting at a rate of 4 to 12 oz. Select a rate, based on soil type from either Rate Table 5 or Rate Table 6.

For burndown of weeds and grasses not listed above, or for burndown of larger weeds and grasses, it is recommended that CANOPY® be tankmixed with such herbicides as 2,4-D LVE, paraquat, and/or glyphosate.

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.

# Sequential Applications - Southern Region States

CANOPY® may be applied at reduced rates when followed by one planned postemergence treatment of either DuPont<sup>TM</sup> SYNCHRONY® XP, DuPont<sup>TM</sup> CLASSIC®, or CLASSIC® + DuPont<sup>TM</sup> HARMONY® GT XP herbicides, or by other herbicides registered for soybeans. Select a rate of CANOPY®, according to soil type, from Rate Table 6.

# Rate Table 6 - Sequential Applications - CANOPY® followed by Postemergence

Broadcast Rate (Ounces per Acre)

Soil Texture	1/2 - 4% Organic Matter
Any*	3-3.5
Coarse:	
Loamy Sand, Sandy Loam	4-6
Medium:	
Loam, Silt loam, Silt,	
Sandy Clay Loam	4-6
Fine:	
Silty Clay Loam, Clay Loam,	<b>,</b>
Clay	6-8
* 3.5 oz/acre is the maximum rat	te that may be used on soils with a

\* 3.5 oz/acre is the maximum rate that may be used on soils with a composite pH greater than 7.0. When re-cropping to rice and using 3-3.5 oz/acre on soils with pH greater than 7.0, the recrop interval is 18 months.

#### Rotational Guidelines for Fall and Spring CANOPY® Applications - Southern Region States

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 Southern section of this label, the table describes the minimum length in months from the time of CANOPY® application before CANOPY® treated soil can be replanted to the crops listed in the table. For Fall applications, begin counting the re-cropping 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 Guideline 2 - Southern Region**

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

Group I - composite soil pH greater than 7.0, maximum 3.5 oz/acre CANOPY®, no postemerge CLASSIC® or SYNCHRONY® XP

All southern states

#### Group 1 - soil pH 7.0 or less

- States of AL, AR, FL, GA, LA, MS or TX
- States of KY, MO Bootheel, NC, OK, SC, TN Use rate less than 10 oz./A

(If rate is 10 oz/A or greater, use Group II Guideline)

#### Group II - soil pH greater than 7.0 and DuPont™ CANOPY® rate greater than 3.5 oz/acre

#### All southern states

Crops	Group I	Group II
Soybeans	Anytime	Anytime
Barley, Ryegrass, Wheat, Winter Rye	4	4
Alfalfa	10	18
Clover	12	18
Field Corn *	9/10 <sup>+</sup>	. 18
Cotton	10	18
Peanuts	. 8	18
Rice §	10	18
Sorghum	10	18
Tobacco (Transplant)	10	18
Tomato (Transplant)	10	18
Cucumber, Flax, Pumpkin, Sunflower, Sweet Corn, Watermelon, Cabbage, Canola (rapeseed), Lentils, Mustard, Carrot, Onion, Potato, Sugar Beets and any crop	10	20
not listed above	18	30

- \* 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 recropped without damage or yield loss. Users should seek the advice of their seed corn company agronomists regarding inbred sensitivity to herbicides prior to planting any inbred lines.
- † may be recropped to field corn after 9 months if the CANOPY® rate does not exceed 6 oz/acre.
- § the recrop to rice is 18 months after 3-3.5 oz/acre is used on soils with a composite pH greater than 7.0.

#### SPRAY TANK PREPARATION

It is important that spray equipment is clean and free of existing pesticide deposits before using CANOPY®. 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.

NflX

Notes: During an extended period where spraying or mixing equipment will be used to apply multiple loads of CANOPY®, 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: CANOPY® may be applied by air for early preplant, preplant incorporated or preemergence use on soybeans. Apply uniformly with properly calibrated aerial equipment. Use a minimum of 2 gallons of water per acre. Avoid overlapping. Continuous agitation of the spray tank is required to keep the material in suspension.

#### **MIXING INSTRUCTIONS**

Fill tank 1/4 full with water. Start agitation system, add CANOPY® 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.
- Mix 2 teaspoons CANOPY® 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 CANOPY®/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 DuPont<sup>™</sup> CANOPY® 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 CANOPY® spray preparations the same day as mixed or product degradation may occur. Thoroughly reagitate 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 CANOPY® as follows:\*

- 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 ENVIRON-MENTAL 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.

#### 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<sup>™</sup> CANOPY® 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 DuPont<sup>™</sup> CANOPY<sup>®</sup>, 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 metribuzin, check with the soybean seed company before treating a field of that soybean variety with CANOPY® (contains metribuzin).
- 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.
- 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
- 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.
- Thoroughly clean CANOPY® from application equipment immediately after use and prior to spraying crops other than soybeans. Failure to remove even small amounts of CANOPY® from application equipment may result in injury to subsequently sprayed crops.
- 9. Do not tank mix CANOPY® with organophosphate insecticides. Do not apply CANOPY® within 14 days before or after an application of an organophosphate insecticide, as severe crop injury may occur. Injury to soybeans may occur if CANOPY® is used in conjunction with soil-applied organo-phosphate pesticides such as "Di-Syston", "Mocap", "Nemacur", "Thimet", parathion, or "Lorsban".

#### 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.

**Pesticide 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 Handling: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Nonrefillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with DuPont<sup>™</sup> CANOPY® containing metribuzin and chlorimuron ethyl only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Disposing of Fiber Drum and/or Liner: Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with CANOPY® containing metribuzin and chlorimuron ethyl only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use the container, contact DuPont at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact DuPont at the number below for instructions. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Outer Foil Pouches of Water Soluble Packets (WSP): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously.

Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact DuPont at 1-800-441-3637, day or night.

**NOTICE TO BUYER:** Purchase of this material does not confer any rights under patents of countries outside of the United States.

The DuPont Oval Logo, DuPont<sup>™</sup>, CANOPY®, ASSURE®, CLASSIC®, HARMONY®, LINEX®, SYNCHRONY®, LINEX® and SYNCHRONY® are trademarks or registered trademarks of E. I. duPont de Nemours and Company. "Flexstar" is a trademark of Syngenta Crop Protection Inc.

"Lorsban" is a trademark of Dow AgroSciences LLC

"Mocap", "Nemacur" and "Di-Syston" are registered trademarks of Bayer CropScience

"Thimet" is a registered trademark of Micro Flo Company LLC

#### D - 1536 030810

#### 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.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, DUPONT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL DUPONT OR SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES **RESULTING FROM THE USE OR HANDLING OF** THIS PRODUCT. BUYER'S OR USER'S **BARGAINED-FOR EXPECTATION IS CROP** PROTECTION. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW. THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF DUPONT OR SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, TORT OR STRICT LIABILITY), WHETHER FROM FAILURE TO PERFORM OR INJURY TO CROPS OR OTHER PLANTS, AND **RESULTING FROM THE USE OR HANDLING OF** THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT. OR AT THE ELECTION OF DUPONT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

For product information call: 1-888-6-DUPONT Internet address: http://cropprotection.dupont.com/ © 1999-2010 E. I. du Pont de Nemours and Company, 1007 Market Street, Wilmington, Delaware 19898. All rights reserved.