



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:

352-819

Date of Issuance:

APR - 7 2010

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance: **Conditional**

Name of Pesticide Product:

DuPont Pastora Herbicide

Name and Address of Registrant (include ZIP Code):

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

~~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 provided that you:

1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.
2. Submit the following product-specific studies within **one (1) year** from the date of this notice:
 - a. Guideline 830.6317: Storage Stability
 - b. Guideline 830.6320: Corrosion Characteristics
3. Submit the following studies for nicosulfuron within **two (2) years** from the date of this notice:
 - a. Guideline 870.3200: 21/28-Day Dermal Toxicity Study
 - b. Guideline 870.3465: Subchronic (28-day) Inhalation Study
 - c. Guideline 870.6200: Acute and Subchronic Neurotoxicity Studies
 - d. Guideline 870.7800: Immunotoxicity Study
 - e. Guideline 830.1380: Storage Stability
 - i. Grass forage and hay: Submit the final concurrent storage stability study reflecting storage stability of nicosulfuron and IN-V9367 in/on grass forage and hay stored frozen for up to 9.6 and 12.4 months, respectively.
 - ii. Livestock tissues: Submit the outstanding storage stability study reflecting storage stability of nicosulfuron and IN-V9367 in livestock tissues stored frozen for up to 9.4 months.

Continued on page 2

Signature of Approving Official:

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

Date:

APR - 7 2010

- f. Guideline 835.4300: Aerobic Aquatic Metabolism
 - g. Guideline 835.4400: Anaerobic Aquatic Metabolism
 - h. Guideline 850.1025: Acute Toxicity Estuarine and Marine Organisms
 - i. Guideline 850.1400: Freshwater Fish Early-Life Stage
 - j. Guideline 850.2100: Avian Oral Toxicity (Mallard Duck and Passerines)
 - k. Guideline 850.2300: Avian Reproduction
 - l. Guideline 850.4400: Aquatic Plant Growth Vascular
 - m. Guideline 850.5400: Aquatic Plant Growth Non-Vascular
 - n. Submit Environmental Chemistry Methods (ECM) and Independent Laboratory Validation (ILV) to support the terrestrial field dissipation studies.
4. Submit the following studies within **four (4) years** from the date of this notice:
- a. Guideline 860.1500: Crop Field trials
Submit a single residue decline trial for grass. Conduct the trial according to the maximum use pattern for grasses.
 - b. Guideline 860.1900: Field Accumulation in Rotational Crops
Submit limited rotational crop trials on representative crops of root and tuber vegetables, leafy vegetables or soybean, and small grains, reflecting an application rate of 0.088 lb ai/A.
5. Make the following label changes:
- a. Change the EPA Reg. No. to “**352-819**”.
 - b. On page 1, revise the text “For Use on Established Bermudagrass” to include all uses.
 - c. Change the heading from “Inert Ingredients” to “**Other Ingredients**”.
 - d. The First Aid “If Swallowed” statement is optional for this product.
 - e. Move the HAZARDS TO HUMANS AND DOMESTIC ANIMALS statement “Harmful if absorbed through skin.” before “Avoid contact with skin, eyes or clothing.”
 - f. Change the heading to “PERSONAL PROTECTIVE EQUIPMENT (**PPE**)”.
 - g. Change the USER SAFETY RECOMMENDATIONS phrase to “Remove clothing/**PPE**”.
 - h. Change the ENVIRONMENTAL HAZARDS phrase to “equipment washwaters or **rinsate**.”
 - i. Due to the importance of resistance management to a long-term pest-management strategy, it is suggested that resistance management grouping symbols and statements be included on the labeling as described in PR Notice 2001-5.
 - j. On page 2, change the text to “DuPont PASTORA **must** be used only in accordance with instructions on this label or in separate DuPont publications.”

- k. Throughout the label, change the heading from “GENERAL INFORMATION” to “**PRODUCT INFORMATION**” and from “GENERAL APPLICATION INFORMATION” to “**APPLICATION INFORMATION**”.
- l. On page 3 under Application Timing, change the text to “**Apply** PASTORA ~~may be applied~~ to bermudagrass that has been established for at least one growing season.”
- m. On pages 4-5 under SPECIFIC WEED PROBLEMS, make the following changes:
 - i. Under Blackberry, Dewberry, Multiflora Rose, “~~Applications should be made~~ **Apply** in the spring, soon after plant is fully leafed and is less than 3 feet tall.”
 - ii. Under Kochia, Russian thistle, Prickly lettuce, “**Apply** PASTORA ~~should be applied~~ in the spring when kochia, Russian thistle, and prickly lettuce...actively growing.”
 - iii. Under Pensacola bahiagrass, “~~Applications should be made~~ **Apply** when moisture is sufficient to enhance grass growth.”; “**Do not use** DuPont PASTORA ~~should not be used~~ for the control of common or Argentine bahiagrass.”; “Also, **do not apply** PASTORA ~~should not be applied~~ in liquid fertilizer solutions for Pensacola...”
 - iv. Under Sandbur, “~~Applications should be made~~ **Apply** when sandbur is less than 1.5” tall and/or across and is actively growing.”
- n. On page 6 under ADDITIONAL USES, either remove or revise the text to “**To the extent consistent with applicable law**, this risk must be assumed by the user.”
- o. On page 6 under Ground Application, add the restriction “When applying by ground, maintain a 50-foot buffer between the point of direct application and the closest downwind edge of non-target aquatic and terrestrial areas. Apply only using nozzles which will deliver medium or larger (VMD >175 microns) droplets as defined by ASABE S572 standard. Do not apply with a nozzle height greater than 4 feet above the ground or crop canopy. Do not apply when wind speed is greater than 10 mph. Do not apply during a temperature inversion.”
- p. On page 6 under Aerial Application, add the restriction “When applying by air, maintain a 100-foot buffer between the point of direct application and the closest downwind edge of non-target aquatic and terrestrial areas. Apply only using nozzles which will deliver medium or larger (VMD >175 microns) droplets as defined by ASABE S572 standard. Do not release spray at a height greater than 10 feet above the ground or crop canopy unless a greater height is required for aircraft safety. Do not apply when wind speed is greater than 10 mph. Do not apply during a temperature inversion.”
- q. On page 7, change the text to read “6. If only Ammonia is used as a cleaner...to the crop(s) ~~recommended~~ **listed** on this label.”
- r. On page 8 under GRAZING/HAYING, add “Do not enter within 4 hours of treatment if cutting hay for sale.” after “Coveralls, shoes plus socks must be worn if cutting within 4

hours of treatment.”

- s. On page 8 under IMPORTANCE OF DROPLET SIZE, change the first sentence to read “The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control.”
- t. On page 8 under Application Height, change the statement to “Do not release spray at a height greater than 10 feet above the ground or crop canopy unless a greater height is required for aircraft safety.”
- u. On page 9, change the heading from “PRECAUTIONS” to “RESTRICTIONS AND PRECAUTIONS”. It is suggested that the advisory precautions be distinguished from the mandatory restrictions by placing them under separate subsections.
- v. On page 10, make the following changes to STORAGE AND DISPOSAL section:
 - i. Add the statement “Do not contaminate water, food, or feed by storage and disposal.” directly below the heading.
 - ii. 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.”
 - iii. Change the CONTAINER HANDLING section to the “DuPont Default Universal Container Handling Statements (FINAL 12-07-09)” version.

The basic and alternate confidential statements of formula (CSF) dated November 5, 2008 are acceptable.

A stamped copy of the label is enclosed for your records. Submit one (1) copy of the revised final printed label before you release the product for shipment. Products shipped after eighteen (18) months from the date of this notice 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.

Enclosure



H-

5
17

DuPont™ Pastora™
herbicide

DRAFT LABEL

DUPONT™ PASTORA™ HIGHLIGHTS

- For selective, postemergence annual and perennial broadleaf and grass weed control in established bermudagrass pastures
- Recommended for land primarily dedicated to pasture (see Crop Rotation section for information)
- May be applied by ground or by air
- Apply 1.0 to 1.5 ounces product per acre
- Always include a spray adjuvant as recommended in this label unless otherwise directed
- There are no grazing or haying restrictions for PASTORA™
- 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 2

Environmental Conditions and Biological Activity 2

Application Information 3

Weeds Controlled or Suppressed 3

Specific Weed Problems 4

Tank Mixtures 5

General Application Information 6

GRAZING/HAYING 7

CROP ROTATION 7

BIOASSAY 8

SPRAY DRIFT MANAGEMENT 8

 Importance of Droplet Size 8

 Controlling Droplet Size—General Techniques 8

 Controlling Droplet Size—Aircraft 8

 Boom Height 8

 Wind 8

 Temperature and Humidity 8

 Temperature Inversions 8

 Shielded Sprayers 9

WEED RESISTANCE 9

INTEGRATED PEST MANAGEMENT 9

PRECAUTIONS 9

STORAGE AND DISPOSAL 10

NOTICE OF WARRANTY 10



DuPont™ Pastora™

herbicide

Dry Flowable

For Use on Established Bermudagrass

Active Ingredient	By Weight
Nicosulfuron	56.2%
2-[[[(4,6-dimethoxypyrimidin-2-yl)aminocarbonyl]aminosulfonyl]-N,N-dimethyl-3-pyridinecarboxamide]	
Metsulfuron Methyl	
Methyl 2-[[[(4-methoxy-6-methyl-1,3,5-triazin-2yl)amino]carbonyl]amino]sulfonyl]benzoate	15.0%
Inert Ingredients	28.8%
TOTAL	100.0%

EPA Reg. No. 352-XXX

EPA Est. No. _____

Nonrefillable Container

Net: _____

OR

Refillable Container

Net: _____

ACCEPTED
with COMMENTS
in EPA Letter Dated

APR - 7 2010

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

352-819

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 IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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 SWALLOWED: Call a 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. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-441-3637 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Causes eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Harmful if absorbed through skin.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Shoes plus socks.

Chemical resistant gloves Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all > 14 mils.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

USER SAFETY RECOMMENDATIONS

Users should: Wash hands 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.

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 when disposing of equipment washwaters. Do not apply where/when conditions could favor runoff.

IMPORTANT INFORMATION

PESTICIDE HANDLING

- Calibrate sprayers only with clean water away from the well site.
- Make scheduled checks of spray equipment.
- Assure accurate measurement of pesticides by all operation employees.
- 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/uses.
- Avoid storage of pesticides near well sites.
- When triple rinsing the pesticide container, be sure to add the rinsate to the spray mix.

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.

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 4 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.
- Shoes plus socks.
- Chemical resistant gloves Category A (such as butyl rubber, natural rubber, neoprene rubber, or nitrile rubber), all > 14 mils.

DuPont™ PASTORA™ should be used only in accordance with instructions on this label or in separate DuPont publications.

DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specified by DuPont.

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

GENERAL INFORMATION

PASTORA™ herbicide is registered for use on bermudagrass pastures and hay meadows and for use in non-crop areas. Check with your state extension or Department of Agriculture before use, to be certain PASTORA™ is registered in your state. Do not use PASTORA™ in the following counties of Colorado: Alamosa, Conejos, Costilla, Rio Grande, and Saquache.

PASTORA™ is a dry-flowable granule that controls or suppresses broadleaf and grass weeds in bermudagrass pasture. PASTORA™ is mixed in water and applied as a uniform broadcast spray. A spray adjuvant must be used in the spray mix unless otherwise specified on this label. PASTORA™ is noncorrosive, nonflammable, nonvolatile, and does not freeze.

PASTORA™ controls broadleaf weeds by preemergence and postemergence activity and grass weeds by postemergence activity. For best results, apply PASTORA™ to young, actively growing weeds. Weeds hardened off by cold weather or drought stress may not be controlled. The use rate depends upon the weed spectrum and size of weeds at application. The degree and duration of control may depend on the following factors:

- weed spectrum and infestation intensity
- weed size at application
- environmental condition at and following treatment

It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded as well as seasonally dry flood deltas. DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

Environmental Conditions and Biological Activity

PASTORA™ is absorbed through the foliage and roots of weeds, rapidly inhibiting their growth. Leaves of susceptible plants appear chlorotic from 1 to 3 weeks after application and the growing point subsequently dies. The final effects on annual weeds are evident about 4 to 6 weeks after application. The ultimate effects on perennial weeds occur in the growing season following application.

One to two inches of rainfall or sprinkler irrigation (enough to wet the top 2-3 inches of soil profile) may be needed to move PASTORA™ into the weed root zone before the next flush of broadleaf weeds emerge. The amount of moisture required for sufficient activation increases with crop or weed residue and for finer textured soils. Without sufficient rainfall or sprinkler irrigation to move PASTORA™ into the weed root zone, weeds that germinate after treatment will not be controlled.

Application of DuPont™ PASTORA™ provides the best control in vigorously growing pastures that shade competitive weeds. Weed control in areas of thin grass may not be as satisfactory. However, a bermudagrass canopy that is too dense at application can intercept spray and reduce weed control.

In warm, moist conditions, the expression of herbicide symptoms is accelerated in weeds; in cold, dry conditions, expression of herbicide symptoms is delayed. In addition, weeds hardened-off by drought stress are less susceptible to PASTORA™.

Weed control or suppression may be reduced if rainfall, or sprinkler irrigation occurs within 4 hours after application.

Weed control should be part of an overall pasture management plan which includes good fertility, adequate moisture (rainfall, irrigation), insect and rodent control, and other agronomic practices which maximize bermudagrass growth. Consult your state cooperative extension service, local agricultural dealer, professional consultant or other qualified authority for specific instructions regarding proper management of bermudagrass pastures.

APPLICATION INFORMATION

Application Timing

PASTORA™ may be applied to bermudagrass that has been established for at least one growing season. For best results, time applications to young, actively growing broadleaf or grass weeds.

Applications of PASTORA™ may result in temporary yellowing or stunting of bermudagrass. Crop response is more likely if bermudagrass is stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, or cultural practices.

Applications targeting winter and early season weeds while the bermudagrass is dormant will minimize potential for crop response.

Spring or summer applications of PASTORA™ may temporarily reduce grass production. Crop response is minimized by treating when bermudagrass has less than 2" of new growth during initial green-up or by treating within 7 days after cutting for hay.

Weeds may continue to germinate throughout the growing season. Also, regrowth of treated weeds may occur due to adverse environmental conditions. To control weeds under these conditions, a sequential application of PASTORA™ may be necessary. Allow at least 16 days between applications of PASTORA™.

Use Rates

Apply 1.0 to 1.5 ounces PASTORA™ per acre as a broadcast application to established bermudagrass pastures. Do not apply more than 2.5 ounces of PASTORA™ per acre per year.

For spot applications, mix 2.5 ounces of PASTORA™ per 100 gallons of water for suppression of weeds on the WEEDS CONTROLLED OR SUPPRESSED list. Spot applications may be made using equipment such as back pack, ATV, or hand sprayers. Thorough coverage of foliage and stems is necessary to optimize results.

Spray Adjuvants

Unless otherwise directed, applications of PASTORA™ must include a surfactant. In addition, an ammonium nitrogen fertilizer can be used unless specifically prohibited by tank mix partner labeling. Consult local DuPont fact sheets, technical bulletins, and service policies prior to using other adjuvant systems. If another herbicide is tank mixed with PASTORA™, select adjuvants authorized for use with both products. Products must contain only EPA-exempt ingredients (40 CFR 1001).

Nonionic Surfactant (NIS)

- NIS is the preferred surfactant under most conditions
- Apply at 0.25% v/v (1 quart per 100 gallons 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.

Crop Oil Concentrate (COC)

- Use of COC may increase the potential for bermudagrass injury.
- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) with at least 15% surfactant emulsifiers.

Ammonium Nitrogen Fertilizer

- Use 2 quarts/acre of a high-quality urea ammonium nitrate (UAN), such as 28%N or 32%N, or 2 pounds/acre of a spray grade ammonium sulfate (AMS). Use 4 quarts/acre UAN or 4 pounds/acre AMS under arid conditions. See "Tank Mixtures with Liquid Solution Fertilizer" for instructions on using fertilizer as a carrier in place of water.

Special Adjuvant Types

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

Antifoaming agents may be used if needed.

Do not use low rates of liquid fertilizer as a substitute for surfactant .

WEEDS CONTROLLED OR SUPPRESSED

Unless otherwise directed, treat when broadleaf weeds are less than 4" and grass weeds are less than 2" tall or in diameter and are actively growing.

Before using PASTORA™, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your pasture acres at the same time.

Broadleaf pasture species, such as alfalfa and clover, are highly sensitive to DuPont™ PASTORA™ and will be severely stunted or injured.

1.0 ounce per acre

Annual marshelder	Marestail
Barnyardgrass	Mayweed chamomile
Bitter sneezeweed	Miners lettuce
Blackeyed-Susan	Morningglory (ivyleaf, pitted, tall)
Blue/purple mustard*	Musk thistle*
Broadleaf signalgrass	Panicum (browntop, fall, Texas)
Broomweed, common	Pigweed (redroot, smooth, tumble)
Buckbrush‡	Plains coreopsis
Bur buttercup (testiculate)	Plantain
Burclover	Pokeweed‡
Burcucumber	Prickly lettuce*
Buttercup	Prostrate knotweed*‡
Canada thistle*‡	Purple scabious
Carolina geranium	Quackgrass‡
Coast fiddleneck (tarweed)	Russian thistle*
Common chickweed	Ryegrass* (Italian, perennial)
Common mullein	Sandbur* (field, longspine)
Common purslane	Scotch thistle*
Common yarrow	Shattercane
Conical catchfly	Shepherd's purse
Corn gromwell*‡	Smallseed falseflax
Cowcockle	Smartweed (green, ladythumb, pale, PA)
Crabgrass, large*‡	Snow speedwell
Curly dock	Sorghum alum
Cutleaf evening primrose*‡	Tansymustard*
Dandelion	Timothy
Dogfennel	Treacle mustard (Bushy Wallflower)
Downy brome‡	Tumble/Jim Hill mustard
False chamomile	Volunteer cereals (barley, oats, rye, triticale, wheat)
Field pennycress (fanweed)	Volunteer sunflower*
Filaree	Waterpod
Flixweed*	Western snowberry‡
Foxtails (bristly, giant, green, yellow)	Wild buckwheat*‡
Goosegrass‡	Wild carrot
Groundsel (common)	Wild garlic*
Hemp dogbane‡	Wild mustard
Henbit	Wild oats
Horsemint (beebalm)	Wild proso millet
Itchgrass	Wild sunflower*‡
Jimsonweed	Wirestem muhly
Johnsongrass (seedling, rhizome up to 18")	Witchgrass
Kochia*	Woolly croton*
Lambsquarters (common, slimleaf)	Woolly Cupgrass

Additional weeds at 1.25 to 1.5 ounces per acre

Annual sowthistle	Multiflora rose*‡
Aster	Pensacola bahiagrass*
Bittercress	Plumeless thistle‡
Blackberry*‡	Redstem filaree
Broom snakeweed*‡	Rough fleabane
Buckhorn plantain‡	Seaside arrowgrass
Chicory	Sericea lespedeza*
Clover	Silky crazyweed (locoweed)
Cocklebur	Spotted knapweed*‡
Corn cockle	Sweet clover
Crown vetch	Teasel‡
Dewberry*‡	Wild lettuce
Goldenrod	Wood sorrel
Honeysuckle‡	Yankeweed
Maximillion sunflower	

* See the Specific Weed Problems section.

‡ Weed suppression is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of suppression varies with the rate used, the size of the weeds, and the environmental conditions following treatment.

SPECIFIC WEED PROBLEMS

Note: Thorough spray coverage of all weed species listed below is very important.

Blackberry, Dewberry, Multiflora Rose: For suppression with broadcast applications, apply PASTORA™ at 1.5 ounces per acre. Applications should be made in the spring, soon after plant is fully leafed and is less than 3 feet tall.

Blue/Purple Mustard, Flixweed, and Tansymustard: For best results, apply PASTORA™ tank mixtures with 2,4-D or MCPA postemergence to mustards, but before bloom.

Broom Snakeweed: For best results, apply PASTORA™ at 1.5 ounces/acre in the fall.

Canada Thistle: For suppression, apply either PASTORA™ or PASTORA™ plus 2,4-D or MCPA in the spring after the majority of thistles have emerged and are small (rosette stage to 6" elongating stems) and actively growing. The application will inhibit the ability of emerged thistles to compete with grass.

Corn Gromwell, Cutleaf Evening Primrose and Prostrate Knotweed: Apply PASTORA™ when weeds are actively growing, are no larger than 2" tall, and when crop canopy will allow thorough coverage. Tank mixing 2,4-D or MCPA with PASTORA™ can improve results.

Crabgrass (large): For best results, apply PASTORA™ at 1.25 to 1.5 ounces per acre and add an ammonium nitrogen fertilizer (see "Spray Adjuvants"). Do not expect satisfactory suppression of smooth crabgrass.

Kochia, Russian thistle, Prickly lettuce: Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use PASTORA™ in a tank mix with dicamba (such as "Banvel" or "Clarity") and 2,4-D. PASTORA™ should be applied in the spring when kochia, Russian thistle, and prickly lettuce are less than 2" tall or 2" across and are actively growing.

Musk Thistle, Scotch Thistle: Apply PASTORA™ at 1.0 to 1.5 ounces per acre in the spring or early summer prior to flowering or in the fall after newly emerged plants have reached the rosette stage of growth. Certain biotypes of Musk and Scotch Thistles are less sensitive to PASTORA™ and may not be fully controlled with PASTORA™. Consult with your local DuPont representative, dealer or applicator for specific use rate and tank mix instructions for your area. Fall applications should be made before the soil freezes.

Pensacola bahiagrass: Apply PASTORA™ at 1.25 to 1.5 ounces per acre after green-up in the spring but before bahiagrass seedhead formation. Application should be made when moisture is sufficient to enhance grass growth.

PASTORA™ is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pastures, the use of PASTORA™ can clear the areas of useful forage until the bermudagrass has time to cover the area. Therefore, PASTORA™ treatments should be spread out over a period of years. Do not apply to an entire farm or ranch in one year. Fertilization (particularly with nitrogen and potassium) and/or replanting may accelerate the process of reestablishment of bermudagrass.

Under heavy bahiagrass pressure, grazing pressure, or adverse weather conditions (heat and drought), bahiagrass regrowth may occur.

DuPont™ PASTORA™ should not be used for the control of common or Argentine bahiagrass. Also, PASTORA™ should not be applied in liquid fertilizer solutions for Pensacola bahiagrass control, as poor control and/or regrowth may occur.

Ryegrass (Italian, perennial): For best results when ryegrass is greater than 2" in height or for heavy populations, apply PASTORA™ at 1 ounce per acre and follow with a second application at 1 ounce per acre in 3 to 4 weeks.

Sandbur: Application should be made when sandbur is less than 1.5" tall and/or across and is actively growing. Make applications to bermudagrass that is less than 4" tall following initial green-up in the spring, or after cutting for hay. Tall, dense stands of bermudagrass can intercept spray and reduce sandbur control. A follow-up application of PASTORA™ may be necessary to control subsequent germination (flushes) of sandbur following the first application.

Sandbur greater than 1.5" tall may be suppressed resulting in a reduction in sandbur seedheads.

Sandbur Management should be part of an overall pasture management plan which includes good fertility, adequate moisture (rainfall, irrigation), insect and rodent control, and other agronomic practices which maximize bermudagrass growth. In contrast, sandbur control in areas with thin stands of bermudagrass may not be satisfactory.

Sericea lespedeza: For best results, apply PASTORA™ at 1.25 to 1.5 ounces per acre beginning at flower bud initiation through the full bloom stage of growth. Do not make applications if drought conditions exist at intended time of application.

Spotted Knapweed: For best results, apply PASTORA™ at 1.5 ounces per acre with 8 fluid ounces per acre of dicamba (such as "Banvel" or "Clarity") and 16 ounces active ingredient per acre of 2,4-D.

Sunflower (wild or volunteer): Apply either PASTORA™ or PASTORA™ plus 2,4-D or MCPA after the majority of sunflowers have emerged, are 2" to 4" tall and are actively growing. Use spray volumes of at least 3 gallons by air or 10 gallons by ground.

Wild Buckwheat: For best results, apply PASTORA™ plus 2,4-D or MCPA when plants have no more than 3 true leaves (not counting the cotyledons). If plants are not actively growing, delay treatment until environmental conditions favor active weed growth.

Wild Garlic: Apply PASTORA™ in the early spring when wild garlic is less than 12" tall with 2" to 4" of new growth. Typical symptoms of dying garlic plants may not be noticeable for 2 to 5 weeks.

Woolly Croton: Apply PASTORA™ in the late spring or early summer from cotyledon through 2 true leaf stage.

TANK MIXTURES

With Insecticides and Fungicides

PASTORA™ may be tank mixed or used sequentially with insecticides and fungicides registered for use on pastures.

However, under certain conditions (drought stress or cold weather), tank mixes or sequential applications of PASTORA™ with organophosphate insecticides (such as parathion) may produce temporary grass yellowing or, in severe cases, grass injury.

The potential for grass injury is greatest when wide fluctuations in day/night temperatures occur just prior to or soon after application.

Test these mixtures in a small area before treating large areas.

Do not use PASTORA™ plus Malathion, as grass injury will result.

With Herbicides

PASTORA™ may be tank mixed with other suitable registered herbicides to control weeds listed as suppressed, weeds resistant to PASTORA™, or weeds not listed under **Weeds Controlled**. Read and follow all manufacturer's label directions for the companion herbicide. If those directions conflict with this label, do not tank mix the herbicide with PASTORA™. Some herbicide tank mixes may antagonize grass weed control.

Other Herbicides: For postemergence control of the following weeds in pastures:

Carolina horsenettle	Giant ragweed
Common milkweed	Western ragweed
Common ragweed	

Apply PASTORA™ at 1.0 to 1.5 ounces per acre in a tank mix with one of the following products. Refer to companion herbicide labels to confirm that the product is labeled for control of the weeds listed above and is registered for use in your state.

Product	Rate (ounce product/A)
"Grazon" P+D	8 to 32
"Tordon" 22K	4 to 16
"Weedmaster"	8 to 32
"Remedy"	8
"Amber"	0.35*

* For suppression of Western Ragweed In Phenoxy Restricted and Herbicide Regulated Counties

Product	Rate (ounce A.I./A)
2,4-D	8 to 16
Dicamba (such as "Banvel" or "Clarity")	2 to 16
2,4-D + Dicamba	1 + 2.87 to 4 + 11.48

With Liquid Nitrogen Solution Fertilizer

Liquid nitrogen fertilizer solutions may be used as a carrier in place of water. Run a tank mix compatibility test before mixing PASTORA™ in fertilizer solution.

PASTORA™ must first be slurried with water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the PASTORA™ is added. Use of this mixture is likely to result in temporary grass yellowing or burn.

If using low rates of liquid nitrogen fertilizer (between 5% and 50% of the spray solution volume) in the spray solution, the addition of a non-ionic surfactant is necessary. Add surfactant at 1/4 pint per 100 gallons of spray solution (0.03% v/v).

Do not use a spray adjuvant other than non-ionic surfactant.

When using high rates of liquid nitrogen fertilizer (greater than or equal to 50% of the spray solution volume) in the spray solution, adding spray adjuvant(s) increases the risk of grass injury. Consult your agricultural dealer, consultant, fieldman, or

DuPont representative for a specific recommendation before adding an adjuvant to these tank mixtures.

If 2,4-D or MCPA is included with DuPont™ PASTORA™ and liquid nitrogen fertilizer mixture, ester formulations tend to be more compatible (See manufacturer's label). Do not add spray adjuvants when using PASTORA™ in tank mix with 2,4-D ester and liquid nitrogen fertilizer solutions greater than 5% of the spray volume.

Do not use low rates of liquid fertilizer as a substitute for spray adjuvants.

Do not use with liquid fertilizer solutions with a pH less than 3.0.

ADDITIONAL USES

Switchgrass Grown in Tennessee

PASTORA™ may be used for the control of grass and broadleaf weeds in Alamo switchgrass in the state of Tennessee.

Application can be made any time after the switchgrass has reached the 2-leaf stage. Apply PASTORA™ at 1.0 ounce per acre with non-ionic surfactant when weeds are young and actively growing.

Temporary leaf yellowing or stunting is more likely to occur during the switchgrass establishment year. This risk must be assumed by the user.

Do not make more than two applications of PASTORA™ to switchgrass per year.

NON-AGRICULTURAL USES

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Noncrop weed control is not within the scope of the Worker Protection Standard. Do not enter or allow others to enter the treated area until sprays have dried.

Unimproved Bermudagrass Turf

PASTORA™ may be used for the control of grass and broadleaf weeds in Bermudagrass turf on private, public, and military lands as follows: uncultivated nonagricultural areas (such as airports, highway, railroad, and utility rights-of-way, sewage disposal areas, etc.); uncultivated agricultural areas (such as farmyards, fuel storage areas, fence rows, soil bank land, barrier strips, etc.); and, industrial sites (such as lumberyards, pipelines, tank farms, etc.) including grazed areas on all these sites. It is also recommended for the control of certain noxious and troublesome weeds.

Application can be made any time of the year, except when the soil is frozen. For best results, apply PASTORA™ at 1.0 to 2.0 ounces per acre with a surfactant when weeds are young and actively growing. For spot applications, use 2.5 ounces of PASTORA™ and 2 to 4 pints of non-ionic surfactant per 100 gallons of water. If PASTORA™ is tank mixed with a herbicide that includes an adequate adjuvant package, no additional adjuvant is required.

Temporary leaf yellowing or stunting is more likely to occur at higher rates or when bermudagrass is under environmental stress such as drought.

GENERAL APPLICATION INFORMATION

Spray Equipment

For specific application equipment, refer to the manufacturer's recommendations for additional information on GPA, pressure, speed, nozzle types and arrangements, nozzle heights above the target canopy, etc.

Be sure to calibrate air or ground equipment properly before application. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern with minimum drift. Use higher spray volumes to obtain better coverage when the crop canopy is dense. Avoid swath overlapping, and shut off spray booms while starting, turning, slowing, or stopping to avoid crop injury.

Do not make applications using equipment and/or spray volumes or under weather conditions that might cause spray to drift onto nontarget sites. For additional information on spray drift, refer to the **Spray Drift Management** section of the label.

Continuous agitation is required to keep PASTORA™ in suspension.

Ground Application

To obtain optimum spray distribution and thorough coverage, use flat-fan or low-volume flood nozzles.

For flat-fan nozzles, use at least 10 GPA for broadcast applications.

For flood nozzles on 30" spacings, use at least 10 gallons per acre (GPA), flood nozzles no larger than TK10 (or equivalent), and a pressure of at least 30 pounds per square inch (psi). For 40" nozzle spacings, use at least 13 GPA; for 60" spacings, use at least 20 GPA. It is essential to overlap the nozzles 100% for all spacings.

With "Raindrop RA" nozzles, use at least 30 GPA and ensure that nozzle spray patterns overlap 100%.

Use 50-mesh screens or larger.

Aerial Application

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.

Use a minimum of 2 GPA.

When applying PASTORA™ by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the **Spray Drift Management** section of this label. Aerial application is not permitted in New York state.

Product Measurement

PASTORA™ is measured using the PASTORA™ volumetric measuring cylinder. The degree of accuracy of this cylinder varies by +/- 7.5%. For more precise measurement, use scales calibrated in ounces.

Mixing Instructions

1. Fill the tank 1/4 to 1/3 full of water (If using liquid nitrogen fertilizer solution in place of water, see Tank Mixtures sections for additional details).
2. While agitating, add the required amount of PASTORA™.
3. Continue agitation until the PASTORA™ is fully dispersed, at least 5 minutes.
4. Once the PASTORA™ is fully dispersed, maintain agitation and continue filling tank with water. PASTORA™ should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired) then add the necessary volume of spray adjuvants. Always add spray adjuvants last.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply DuPont™ PASTORA™ spray mixture within 24 hours of mixing to avoid product degradation.
8. If PASTORA™ and a tank mix partner are to be applied in multiple loads, pre-slurry the PASTORA™ in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the PASTORA™.

Do not use PASTORA™ with spray additives that reduce the pH of the spray solution to below 3.0.

Sprayer Cleanup

Before Spraying PASTORA™

Spray equipment must be cleaned before PASTORA™ is sprayed. Follow the cleanup procedures specified on the labels of previously applied products. If no directions are provided, follow the six steps outlined in After Spraying PASTORA™ section of this label.

At the End of the Day

When multiple loads of PASTORA™ herbicide are applied, it is recommended that at the end of each day of spraying, the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will

prevent the buildup of dried pesticide deposits that can accumulate in the application equipment.

After Spraying PASTORA™ and Before Spraying Crops Other Than Bermudagrass

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

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
2. Fill the tank with clean water and 1 gallon of household ammonia* (contains 3% active) for every 100 gallons of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat step 2.
5. Rinse the tank, boom, and hoses with clean water.
6. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

* Equivalent amounts of an alternate-strength ammonia solution or a cleaner which dissolves and removes sulfonylurea herbicide residues can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions.

Notes:

1. **Attention:** Do not use chlorine bleach with ammonia, as dangerous gases will form. Do not clean equipment in an enclosed area.
2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
3. When PASTORA™ is tank mixed with other pesticides, all required cleanout procedures should be examined and the most rigorous procedure should be followed.

Rotation Intervals

Location	Crop or Grass Species	Maximum PASTORA™ Rate on Pasture (ounce/acre)	Minimum Rotation Interval (months)
All areas	Alfalfa, red clover, white clover, sweet clover,	2.0	12
	bermudagrass, bluegrass, ryegrass, tall fescue	2.0	4
	Wheat (except durum)	2.0	4
	Durum, barley, oat	1.5	10
Areas with Soil pH of 7.0 or Less	STS soybeans	1.0	6
	Field corn	1.0	12

4. In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products should be followed as per the individual labels.
5. Where routine spraying practices include shared equipment frequently being switched between applications of PASTORA™ and applications of other pesticides to PASTORA™-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to PASTORA™ to further reduce the chance of crop injury.

GRAZING/HAYING

There are no grazing or haying restrictions for PASTORA™ for livestock including cattle, horses, sheep, goats, and other animals when using PASTORA™ as directed.

Coveralls, shoes plus socks must be worn if cutting within 4 hours of treatment.

CROP ROTATION

Before using PASTORA™, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your pasture acres at the same time.

Minimum Rotational Intervals

Minimum rotation intervals* are determined by the rate of breakdown of DuPont™ PASTORA™ applied. PASTORA™ breakdown in the soil is affected by soil pH, presence of soil microorganisms, soil temperature, and soil moisture. Low soil pH, high soil temperature, and high soil moisture increase PASTORA™ breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow PASTORA™ breakdown.

Of these 3 factors, only soil pH remains relatively constant. Soil temperature, and to a greater extent, soil moisture, can vary significantly from year to year and from area to area. For this reason, soil temperatures and soil moisture should be monitored regularly when considering crop rotations.

* The minimum rotation interval represents the period of time from the last application to the anticipated date of the next planting.

Soil pH Limitations

PASTORA™ should not be used on soils having a pH above 7.9, as extended soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, PASTORA™ could remain in the soil for 34 months or more, injuring wheat and barley. In addition, other crops planted in high-pH soils can be extremely sensitive to low concentrations of PASTORA™.

Checking Soil pH

Before using PASTORA™, determine the soil pH of the areas of intended use. To obtain a representative pH value for the test area, take several 0" to 4" samples from different areas of the field and analyze them separately. Consult local extension publications for additional information on recommended soil sampling procedures.

Bioassay

A field bioassay must be completed before rotating to any crop or grass species/variety not listed in the Rotation Intervals Table, or if the soil pH is not in the specified range, or if the use rate applied is not specified in the table. To conduct a field bioassay, grow test strips of the crop(s) or grass(es) you plan to grow the following year in fields

previously treated with PASTORA™. Crop or grass response to the bioassay will indicate whether or not to rotate to the crop(s) or grass(es) grown in the test strips.

If a field bioassay is planned, check with your local Agricultural dealer or DuPont representative for information detailing the field bioassay procedure.

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

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.

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.

WEED RESISTANCE

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 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.

PRECAUTIONS

- Do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots extend, or in locations where the product may be washed or moved into contact with their roots, as injury or loss of desirable trees or other plants may result.
- Do not use on lawns, walks, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
- Do not use on grasses grown for seed.
- Do not apply to irrigated land where the tailwater will be used to irrigate crops.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.
- Grass species or varieties may differ in their response to various herbicides. DuPont recommends that you first consult your state experiment station, university, or extension agent as to sensitivity to any herbicide. If no information is available, limit the initial use of DuPont™ PASTORA™ to a small area.
- Under certain conditions such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after PASTORA™ application, temporary discoloration and/or grass injury may occur. PASTORA™ should not be applied to grass that is stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage, as grass injury may result. Severe winter stress, drought, disease, or insect damage before or following application also may result in grass injury.
- Applications of PASTORA™ to pastures undersown with legumes may cause injury to the legumes.
- To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, trashy mulch, reduced tillage, or other cultural practices. Injury to immediately adjacent crops may occur when

treated soil is blown onto land used to produce crops other than bermudagrass.

- For ground applications applied to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced. The addition of 2,4-D or MCPA should improve weed control under these conditions.
- Do not apply more than 2.5 ounces of PASTORA™ per acre per year.

STORAGE AND DISPOSAL

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

Pesticide Disposal: Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment. 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 "Refillable Container" or "Nonrefillable 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, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) 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, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) 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. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) 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, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refill this container with DuPont™ PASTORA™ herbicide containing nicosulfuron and metsulfuron methyl only. Do not reuse this container for any other purpose. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. Cleaning the container (fiber drum) before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container (fiber drum) before final disposal, completely empty container by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the container for recycling if available or dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

All Other Refillable Containers: Refillable container. Refill this container with DuPont™ PASTORA™ herbicide containing nicosulfuron and metsulfuron methyl only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) 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. 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.

Outer 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™ and PASTORA™ are trademarks or registered trademarks of E. I. duPont de Nemours and Company.

"Banvel", "Clarity" and "Weedmaster" are trademarks or registered trademarks of BASF Corporation

"Grazon"; Remedy" and "Tordon" are registered trademarks of Dow AgroSciences LLC

"Raindrop" is a registered trademark of GP Companies; Inc.

"Amber" is a registered trademark of a Syngenta Group company.

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

D - 1339 102809

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/>

© 2009 E. I. du Pont de Nemours and Company, Delaware 19898.

All rights reserved.