

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

NOV 1 3 2012

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

Subject:

Label Amendment (add fallow use in CO, KS, NM, OK, and TX at

increased application rate)

**DuPont Cimarron Plus Herbicide** 

EPA Reg. No. 352-670

Application Dated June 20, 2012

Dear Ms. Ashley:

The main and supplemental labels referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, are acceptable.

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

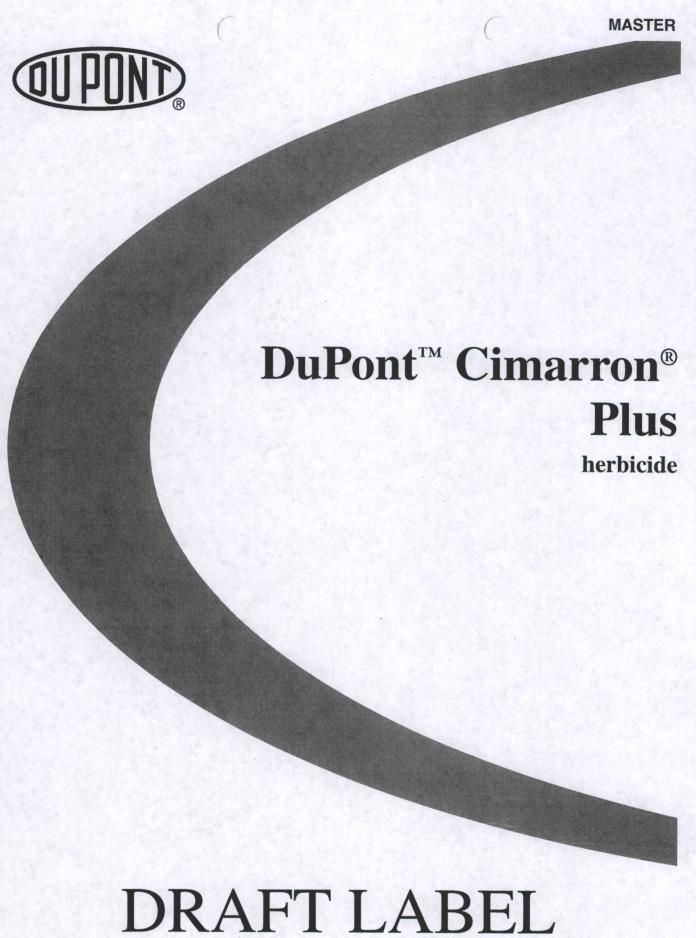
If you have any questions, please contact Mindy Ondish at (703)605-0723 or at ondish.mindy@epa.gov.

Sincerely,

Kable Bo Davis Product Manager 25

Herbicide Branch

Registration Division (7505P)





## **DuPont**<sup>TM</sup> Cimarron® Plus

## herbicide

For Use on Pastures, Rangeland or Established Grasses on Acres Enrolled in the Conservation Reserve Program

Active Ingredients		By Weight
Metsulfuron Methyl		
Methyl 2-[[[(4-methoxy-	6-methyl	
-1,3,5-triazin-2yl)amino]c	arbonyl]	
amino]sulfonyl]benzoate	WARREST AND	48%
Chlorsulfuron		
2-Chloro-N-[(4-methoxy-	6-methyl-	
1,3,5-triazin-2-yl)aminoca	arbonyl]	
benzenesulfonamide		15%
Other Ingredients		37%
TOTAL		100%
EPA Reg. No. 352-670	EPA Est. No	
Nonrefillable Container		
Net:		
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 ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. IF 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 a poison control center or doctor. Do not give anything 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.

GROUP **HERBICIDE** 

## ACCEPTED

NOV 1 3 2012

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under 352-670

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust or spray mist. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals...

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options follow the instructions for Category A on the EPA chemical resistance category selection chart.

Mixers, loaders, applicators, and other handlers must

Long-sleeved shirt and long pants

Chemical Resistant Gloves made of any waterproof material such as polyethylene or polyvinylchloride.

Shoes plus socks

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 the 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. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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 disposing of equipment washwater or rinsate.

## 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.

## **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.

Chemical-resistant gloves made of any waterproof material

Shoes plus socks.

## 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.

DuPont<sup>TM</sup> CIMARRON® Plus must be used only in accordance with instructions on this label or in separate published DuPont labeling. 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.

## PRODUCT INFORMATION

CIMARRON® Plus is registered for use on land primarily dedicated to the production of pasture, rangeland, or established grasses in the Conservation Reserve Program (CRP). This product may also be used on selected uncultivated areas (fence rows, farmyards, and rights-of-way) directly adjacent to, or which transect or pass through, treated pastures, rangeland, or CRP, where grazing or harvesting for animal feed of those uncultivated areas may occur.

CIMARRON® Plus is a dispersible granule that controls or suppresses broadleaf weeds and brush in pasture, rangeland and CRP. CIMARRON® Plus is mixed in water or can be preslurried in water and added to liquid nitrogen carrier solutions and applied as a uniform broadcast spray. A spray adjuvant must be used in the spray mix unless otherwise specified on this label.

CIMARRON® Plus is a broad-spectrum herbicide registered for use on pastures, rangeland or CRP in most states. Check with your state extension or Department of Agriculture before use to be certain CIMARRON® Plus is registered in your state. Do not use CIMARRON® Plus in the following counties of Colorado: Alamosa, Conejos, Costilla, Rio Grande, and Saquache.

CIMARRON® Plus controls weeds by preemergence and postemergence activity. For best results, apply CIMARRON® Plus 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 conditions at and following treatment

It is permissible to apply CIMARRON® Plus to floodplains where surface water is not present, terrestrial areas of deltas, and low lying areas where water is drained but may be isolated in pockets due to uneven or unlevel conditions.

## Environmental Conditions and Biological Activity

DuPont<sup>TM</sup> CIMARRON® Plus is absorbed through the foliage and roots of broadleaf 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 and woody plants occur in the growing seasons following application.

One to two inches of rainfall or sprinkler irrigation (enough to wet the top 2-3 inches of soil profile) is needed to move CIMARRON® Plus into the weed root zone before the next flush of 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 CIMARRON® Plus into the weed root zone, weeds that germinate after treatment will not be controlled.

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

CIMARRON® Plus is safe to desirable grass species under normal conditions. However, grasses that are stressed from adverse environmental conditions (such as extremes in temperatures or moisture), abnormal soil conditions, or cultural practices, may be injured by applications of CIMARRON® Plus. In addition, different species of grass crops may be sensitive to treatment with CIMARRON® Plus under otherwise normal conditions. Application of CIMARRON® Plus to these species may result in injury.

In warm, moist conditions, the expression of herbicide symptoms is accelerated in weeds and brush; in cold and/or dry conditions, expression of herbicide symptoms is delayed. In addition, weeds and brush hardened-off by drought stress are less susceptible to CIMARRON® Plus. Weed and brush control or suppression may be reduced if rainfall, sprinkler irrigation or snowfall occurs within 4 hours after application.

## APPLICATION INFORMATION FOR PASTURES AND RANGELAND

Use Rates for Pastures and Rangeland

## Application Timing—Pastures and Rangeland

CIMARRON® Plus may be used on established native grasses such as bluestems, blue grama, buffalograss and other pasture grasses such as bermudagrass, bluegrass, orchardgrass, bromegrass (except Matua bromegrass) and fescue. Specific application information on several of these pasture grasses follows.

Do not use on bentgrass or susceptible grass pastures such as timothy, carpetgrass, Matua bromegrass or St. Augustine grass.

Applications of CIMARRON® Plus may cause severe injury to and/or loss of Pensacola bahiagrass, ryegrass (Italian or perennial) and Garrison's creeping foxtail pastures

Minimum t	ime from
grass estab	lishment
to CIMARR	ON® Plus

**Pasture Grass** 

application

Bermudagrass 2 months
Bluegrass, bromegrass
(except Matua bromegrass
and orchardgrass) 6 months
Fescue 24 months

## **Buffalograss Precautions:**

Do not use CIMARRON® Plus on buffalograss that has been established for less than one year or on stands grown for seed production. Do not apply more than 0.625 ounces per acre of CIMARRON® Plus to buffalograss.

## **Fescue Precautions:**

Note that CIMARRON® Plus may temporarily stunt fescue, cause it to turn yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- do not use more than 0.5 ounces per acre of CIMARRON® Plus
- use a non-ionic surfactant at 1/2 to 1 pint per 100 gallon of spray solution (1/16 to 1/8% v/v). Do not use a spray adjuvant other than non-ionic surfactant.
- make application later in the spring after the new growth is 5 to 6 inches tall, or in the fall
- do not use surfactant when liquid nitrogen is used as a carrier

The first cutting yields may be reduced due to seedhead suppression resulting from treatment with CIMARRON® Plus.

Other Pasture and Rangeland Grasses: Varieties and species of forage grasses differ in their tolerance to herbicides. When using CIMARRON® Plus on a particular grass for the first time, limit use to a small area. If no injury occurs throughout the season, larger acreage may be treated the following season. Broadleaf pasture species, such as alfalfa and clover, are highly sensitive to CIMARRON® Plus and will be severely stunted or injured by CIMARRON® Plus.

# APPLICATION INFORMATION FOR CONSERVATION RESERVE PROGRAM (CRP)

DuPont<sup>TM</sup> CIMARRON® Plus may be used for the control or suppression of broadleaf weeds in established stands (planted previous year, or earlier) of the following perennial native or improved grasses grown on land enrolled in the Conservation Reserve Program (CRP):

Blue Grama Bluestems big little plains sand WW spar Buffalograss Green sprangletop Indiangrass Kleingrass Lovegrasses atherstone sand weeping wilman

Orchardgrass
Sideoats grama
Switchgrass blackwell
Wheatgrasses crested
intermediate
pubescent
slender
streambank
tall
thickspike
western
Wildrye grass Russian

Because newly planted CRP grass stands do not sufficiently compete with weeds, and because weed pressure in CRP fields is often severe, performance from CIMARRON® Plus may not always be satisfactory. An additional herbicide application or mowing may be needed.

## Application Timing and Use Rates for CRP

CIMARRON® Plus may be applied postemergence at 0.125 to 0.25 ounces per acre to labeled grasses listed above that were planted the previous season and are fully tillered.

## WEEDS AND BRUSH CONTROLLED OR SUPPRESSED IN PASTURES, RANGELAND OR CRP

Unless otherwise directed in the Specific Weed Problem section of this label, treat when weeds are less than 4" tall or in diameter and are actively growing. Before using CIMARRON® Plus, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your pasture, rangeland or CRP acres at the same time.

## 0.125 ounce per acre

Bitter sneezeweed Blue/purple mustard\* Broomweed, common Bur buttercup (testiculate) Buttercup Canada thistle\*‡ Carolina geranium Coast fiddleneck (tarweed) Common chickweed Common purslane Conical catchfly Corn gromwell\*‡ Cowcockle Curly dock Cutleaf evening primrose\*‡ Dandelion False chamomile Field pennycress (fanweed) Filaree Flixweed\* Groundsel (common) Henbit Kochia\* Lambsquarters (common, slimleaf)

Marestail Mayweed chamomile Miners lettuce Pigweed (redroot, smooth, tumble) Plains coreopsis Plantain Prickly lettuce\* Prostrate knotweed\*‡ Russian thistle\* Shepherd's purse Smallseed falseflax Smartweed (green, ladysthumb, pale) Snow speedwell Tansymustard\* Treacle mustard (Bushy Wallflower) Tumble/Jim Hill mustard Volunteer sunflower\* Waterpod Wild buckwheat\*‡ Wild garlic\* Wild mustard Wild sunflower\*‡ Woolly croton\*

## 0.25 ounce per acre

Annual marshelder Blackeyed-Susan Buckbrush‡ Burclover Common yarrow Dogfennel

Horsemint (beebalm) Musk thistle\* Purple scabious Scotch thistle\* Western snowberry‡ Wild carrot

## 0.375 to 0.625 ounce per acre

Annual sowthistle
Aster
Bittercress
Chicory
Clover
Cocklebur
Common mullein
Corn cockle
Crown vetch
Goldenrod
Maximillion sunflower
Multiflora rose\*‡

Pennsylvania smartweed Pensacola bahiagrass\* Redstem filaree Rough fleabane Seaside arrowgrass Sericea lespedeza\* Silky crazyweed (locoweed) Sweet clover Wild lettuce Wood sorrel Yankeweed

## 0.625 to 1.25 ounce per acre

Black henbane
Blackberry
Broom snakeweed\*
Buckhorn plantain
Common crupina
Dewberry
Dyer's woad
Gorse
Halogeton

Honeysuckle
Multiflora rose and other
wild roses\*
Plumeless thistle
Rosering gaillardia
Spotted knapweed\*
Teasel
Wild caraway
Yucca\*‡

## 1.25 ounce per acre

Bull thistle
Common tansy
Field bindweed‡
Gumweed
Houndstongue
Perennial Pepperweed
Poison hemlock
Purple loosestrife

Rush skeletonweed\*‡
Salsify
Scouringrush
Snowberry (Common,
Mountain)
St. Johnswort
Western salsify
Whitetop (hoary cress)

- \* 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**: For best results, thorough spray coverage of all weed species listed below is very important.

Blue/Purple Mustard, Flixweed, and Tansymustard: For best results, apply DuPont<sup>TM</sup> CIMARRON® Plus in tank mixtures with 2,4-D or MCPA postemergence to mustards, but before bloom.

**Broom Snakeweed:** For best results, apply CIMARRON® Plus at 0.625 ounces per acre in the fall. Applications of CIMARRON® Plus in the spring will provide suppression only.

Canada Thistle: For suppression with broadcast applications, apply either CIMARRON® Plus or CIMARRON® Plus with 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.

For suppression with spot applications, apply as a foliar spray once plant is fully leafed.

Corn Gromwell, Cutleaf Evening Primrose and Prostrate Knotweed: Apply CIMARRON® Plus 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 CIMARRON® Plus can improve results.

Kochia, Russian thistle, Prickly lettuce: Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use CIMARRON® Plus in a tank mix with dicamba (such as "Banvel" or "Clarity") and 2,4-D. CIMARRON® Plus 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.

Multiflora Rose: For control with broadcast applications, apply CIMARRON® Plus as a broadcast application when multiflora rose is less than 3' tall. Application should be made in the spring, soon after multiflora rose is fully leafed.

Musk Thistle, Scotch Thistle: Apply CIMARRON® Plus at 0.25 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 CIMARRON® Plus and may not be controlled. Use of CIMARRON® Plus at 0.25 ounces per acre may provide some additional control of these less sensitive

biotypes, but may not achieve acceptable control. Consult with your local DuPont representative, dealer or applicator for specific use rate and tank mix recommendations for your area. Fall applications should be made before the soil freezes.

Pensacola bahiagrass control in established Bermudagrass pasture: Apply CIMARRON® Plus at 0.375 ounces per acre after greenup in the spring but before bahiagrass seedhead formation. Application should be made when moisture is sufficient to enhance grass growth.

CIMARRON® Plus is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pastures, the use of CIMARRON® Plus can clear the areas of useful forage until the bermudagrass has time to cover the area. Therefore, CIMARRON® Plus 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.

CIMARRON® Plus should not be applied in liquid fertilizer solutions for Pensacola bahiagrass control, as poor control and/or regrowth may occur.

CIMARRON® Plus should not be used for the control of common or Argentine bahiagrass.

Plumeless Thistle: For control of plumeless thistle apply CIMARRON® Plus at 0.625 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. Fall applications should be made before the soil freezes.

Rush skeletonweed: For best results, apply CIMARRON® Plus at 1.25 ounces per acre with 8 fluid ounces of dicamba (such as "Banvel" or "Clarity") and 16 fluid ounces of 2,4-D per acre.

Sericea lespedeza: For best results, apply CIMARRON® Plus at 0.625 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 CIMARRON® Plus at 0.625 ounces per acre with 8 fluid ounces of dicamba (such as "Banvel" or "Clarity") and 16 fluid ounces of 2,4–D per acre.

Snowberry (Western, Common, Mountain): For control of snowberry, apply CIMARRON® PLUS at 1.25 ounces after the plants are actively growing. Applications can be made throughout the growing season but before fall defoliation. Tank mixtures with 2,4-D ester improve control (refer to Tank Mixtures section of this label for additional information).

Sunflower (wild or volunteer): Apply CIMARRON® Plus 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 gal by air or 10 gal by ground.

Wild Buckwheat: For best results, apply CIMARRON® Plus 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: For best results, apply DuPont<sup>™</sup> CIMARRON® Plus at 0.125 to 0.25 ounces per acre in the early spring when wild garlic is less than 12" tall with 2" to 4" of new growth.

**Woolly Croton:** For best results, apply CIMARRON® Plus at 0.125 to 0.25 ounces per acre in the late spring or early summer from cotyledon through 2 true leaf stage.

Yucca: For best results, apply CIMARRON® Plus at 0.625 to 1 ounce per acre plus 2,4-D, dicamba, dicamba plus 2,4-D, or "Remedy" from two weeks before blooming to two weeks after blooming.

## Spray Adjuvants

Unless otherwise recommended, applications of CIMARRON® Plus must include either a crop oil concentrate or a nonionic surfactant. Consult local DuPont fact sheets, technical bulletins, and service policies prior to using other adjuvant systems. If another herbicide is tank mixed with CIMARRON® Plus, select adjuvants authorized for use with both products. Products must contain only EPA-exempt ingredients.

## Petroleum Crop Oil Concentrate (COC) 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.

## Special Adjuvant Types

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

**Exceptions:** On Fescue pastures use no more than 1/2 to 1 pint non-ionic surfactant per 100 gallons.

Antifoaming agents may be used if needed.

## **Ammonium Nitrogen Fertilizer**

 Use up to 2% v/v of a high-quality urea ammonium nitrate (UAN), such as 28% N or 32% N, or up to 17 lb/acre of a spray grade ammonium sulfate (AMS).

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

## **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 to pasture, rangeland or CRP.

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 3 GPA.

When applying CIMARRON® Plus 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.

## **TANK MIXTURES**

When tank mixing CIMARRON® Plus, use the most restrictive label limitations for each product used in the mix.

#### With Insecticides and Fungicides

CIMARRON® Plus may be tank mixed or used sequentially with insecticides and fungicides registered for use on pastures, rangeland or CRP. However, under certain conditions (drought stress or cold weather), tank mixes or sequential applications of CIMARRON® Plus 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 CIMARRON® Plus plus Malathion, since grass injury will result.

## Herbicide Tank Mixtures for Pastures or Rangeland:

CIMARRON® Plus may be tank mixed with other suitable registered pasture and rangeland herbicides to control weeds listed as **Weeds Suppressed**, weeds resistant to CIMARRON® Plus, or weeds not listed under **Weeds Controlled**. Read and follow all manufacturer's label instructions for the companion herbicide. If those instructions conflict with this label, do not tank mix the herbicide with CIMARRON® Plus.

CIMARRON® Plus can be applied 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	Race (oz product/A)
"Grazon" P+D	8 to 32
"Tordon" 22K	4 to 16
"Weedmaster"	8 to 32
"Remedy"	8
Product	Rate (oz A.I./A)
2,4-D	8 to 16
Dicamba (such as "Banvel" or "Clarity")	2 to 16
2,4-D + Dicamba	3+1 to $12+4$

## Herbicide Tank Mixtures for CRP: Preplant

DuPont<sup>TM</sup> CIMARRON® Plus may be tank mixed with glyphosate (such as Glyphosate or "Roundup UltraMax") as a pre-plant (prior to the planting of CRP grasses) treatment to control broadleaf and grassy weeds. When using a glyphosate tank mix, allow at least 7 days after application before planting grasses. Refer to glyphosate containing product labels and fact sheets for all use instructions, label rates, weed control claims, warnings and precautions..

## Postemergence

For best weed control performance in CRP, use CIMARRON® Plus in a tank mix with 2,4-D (ester formulations perform best) or dicamba (such as "Banvel" or "Clarity").

CIMARRON® Plus can be tank mixed with 2,4-D at 1/4 pound a.i./A for all labeled grasses larger than the 5-leaf stage. For fully tillered stands, up to 1/2 pound a.i./A of 2,4-D may be used. A spray adjuvant may be added. However, the addition of spray adjuvant may increase the chance of grass injury.

CIMARRON® Plus can also be tank mixed with dicamba (such as "Banvel" or "Clarity"). Use no more than 1/8 to 1/4 pound a.i./A of dicamba plus CIMARRON® Plus after majority of grasses are in the 3-leaf stage. In established grasses (2nd year stands), use no more than 1/4 to 1/2 pound a.i./A dicamba plus CIMARRON® Plus. A spray adjuvant may be added. However, the addition of spray adjuvant may increase the chance of grass injury.

## 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 CIMARRON® Plus in fertilizer solution.

CIMARRON® Plus must first be slurried with clean water and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the CIMARRON® Plus is added.

Use of this mixture may result in temporary grass yellowing and stunting.

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 gallon of spray solution (0.03%). Do not use a spray adjuvant other than non-ionic surfactant.

When using high rates of liquid nitrogen fertilizer (equal to or greater than 50% of the spray solution volume) in the spray solution, adding a spray adjuvant 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 CIMARRON® Plus and fertilizer mixture, ester formulations tend to be more compatible (See manufacturer's label). Do not add a spray adjuvant when using CIMARRON® Plus in tank mix with 2,4-D ester and liquid nitrogen fertilizer solutions greater than 5% of the spray solution volume.

The use of liquid nitrogen fertilizer solutions greater than 5% of the spray solution volume with CIMARRON® Plus at rates greater than 0.25 ounces may cause grass injury.

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

Do not tank mix CIMARRON® Plus with liquid fertilizer solutions with a pH less than 3.0.

#### Minimum Rotational Intervals

Minimum rotation intervals are determined by the rate of breakdown of CIMARRON® Plus applied. CIMARRON® Plus 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 CIMARRON® Plus breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow CIMARRON® Plus 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.

Before using CIMARRON® Plus, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your pasture, rangeland or CRP acres at the same time.

## Soil pH Limitations

CIMARRON® Plus should not be used on soils having a pH above 7.9, because soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, CIMARRON® Plus could remain active in the soil for 34 months or more, injuring subsequent crops.

## Checking Soil pH

Before using CIMARRON® Plus, 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 in fields previously treated with CIMARRON® Plus. 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.

## **CROP ROTATION**

## Rotation Intervals in Pasture, Rangeland or CRP for Overseeding and Renovation

Location	Crop or Grass Species	Maximum DuPont™ CIMARRON® Plus Rate on Pasture (ounce/acre	Minimum Rotation Interval (months)
AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV	Alfalfa, red clover, white clover, sweet clover, bermudagrass, bluegrass, ryegrass, tall fescue	Up to 0.25	4
	Wheat (except durum)	Up to 0.375	1
	Durum, barley, oat	Up to 0.375	10
ALL STATES NOT INCLUDED	Red clover, white clover, and sweet clover	Up to 0.25	12
ABOVE	Bermudagrass, bluegrass, ryegrass	Up to 0.25	6
	Tall Fescue	Up to 0.25	18
	Wheat (except durum)	Up to 0.25	1
	Durum, barley, oat	Up to 0.25	10
ALL AREAS WITH SOIL PH	Russian wildrye	Up to 0.625	1
OF 7.5 OR LESS	Green needlegrass, switchgrass, sheep fescue	Up to 1.25	1
	Meadow brome, smooth brome, alta fescue, red fescue, meadow foxtail, orchardgrass, Russian wildrye, timothy	Up to 1.25	2
ALL AREAS WITH SOIL PH OF 7.9 OR LESS	Alkali sacoton, mountain brome, blue grama thickspike wheatgrass	Up to 1.25	1
	Sideoats grama, switchgrass	Up to 0.625	2
	Western wheatgrass	Up to 1.25	2
	Sideoats grama, switchgrass, big bluestem	Up to 1.25	3
	STS™ soybean	Up to 0.25	6
AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV WITH SOIL PH OF 7.0 OR LESS	Field corn, Soybeans	Up to 0.25	12

## **GRAZING/HAYING**

There are no grazing or hay harvest restrictions for CIMARRON® Plus when applied to range, pasture, CRP, and/or undesirable vegetation in uncultivated areas (fence rows, farmyards, and rights-of-way) which are adjacent to, or pass through or transect, treated pastures, rangeland, or CRP.

Coveralls, shoes plus socks and chemical resistant gloves made of any waterproof material must be worn if cutting within 4 hours of treatment.

## BROADLEAF WEED CONTROL IN WHEAT, BARLEY AND FALLOW IN THE STATES OF COLORADO, KANSAS, NEW MEXICO, OKLAHOMA AND TEXAS

CIMARRON® Plus may be applied alone for control of emerged broadleaf weeds post-emergence, or in combination with other suitable registered herbicides for wheat, barley and fallow. Read and follow all manufacturers label instructions for the companion herbicide. If those instructions conflict with this label, do not tank mix the herbicide with CIMARRON® Plus. If another herbicide is tank mixed with CIMARRON® Plus to increase the

broadleaf weed spectrum, select adjuvants based on the adjuvant limitations of the companion herbicide. 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 State or Tribal agency responsible for pesticide regulation.

Effectiveness may be reduced if rainfall occurs within 4 hours after application. Unless otherwise directed, treat when weeds are less than 4" tall or in diameter and are actively growing.

## WHEAT and BARLEY

## Use Rates

0.125 ounces per acre

#### **Application Timing**

Do not apply during boot and early heading, as crop injury may result. Maximum of one application per growing season.

## **Irrigated Wheat and Barley**

Make applications after the crop begins tillering but before boot. First post-treatment irrigation should be delayed for at least 3 days after treatment and should not exceed 1 inch of water.

## **Dryland Wheat and Barley**

Make applications after the crop is in the 2-leaf stage but before boot.

## FALLOW

#### Use Rates

Use 0.125 to 0.25 ounces per acre. Include a nonionic surfactant, petroleum based crop oil concentrate, or vegetable-seed oilbased product (methylated seed oils are considered a vegetable seed-based oil).

When using more than 0.125 ounces per acre, the fallow area is best planted to cereals (a field bioassay must be completed before rotating to any other crop). See CROP ROTATION for more information.

## **Application Timing**

DuPont™ CIMARRON® Plus may be used as a fallow treatment any time from the spring through the fall when the majority of weeds have emerged and are actively growing.

#### WEEDS CONTROLLED

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

Blue/purple mustard\* Bur buttercup (testiculate) Coast fiddleneck (tarweed) Common chickweed Common purslane Conical catchfly Cowcockle False chamomile Field pennycress (fanweed) Filaree Flixweed\* Groundsel (common) Henbit Kochia\* Lambsquarters (common, slimleaf) Mayweed chamomile

Miners lettuce Pigweed (redroot, smooth, tumble) Plains coreopsis Prickly lettuce\* Russian thistle\* Shepherd's purse Smallseed falseflax\* Smartweed (green, ladysthumb, pale) Snow speedwell Tansymustard\* Treacle mustard\* (Bushy Wallflower) Tumble/Jim Hill mustard Volunteer sunflower Waterpod Wild mustard

## Weeds Suppressed ‡\*

Canada thistle\*
Common sunflower\*
Corn gromwell\*

Knotweed (prostrate)\* Sowthistle (annual)\* Wild buckwheat\*

## \* 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

Blue Mustard, Treacle Mustard, Flixweed, Small seeded falseflax, and Tansymustard: For best results, apply CIMARRON® Plus tank mixtures with 2,4-D or MCPA postemergence to mustards, but before bloom. For Tansy mustard, Flixweed, Treacle mustard and Small seeded falseflax control, apply 0.1 ounces of CIMARRON® Plus plus 1/4 pound active 2,4-D ester. If only Tansy mustard, Flixweed or Treacle mustard are present, apply 0.083

ounces of CIMARRON® Plus plus 1/4 pound active 2,4-D ester for control.

Canada Thistle and Sowthistle: Apply CIMARRON® Plus plus surfactant or CIMARRON® Plus 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 the crop.

Corn Gromwell and Prostrate Knotweed: Apply CIMARRON® Plus plus surfactant 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 CIMARRON® Plus can improve results.

Kochia, Russian thistle, Prickly lettuce: Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use CIMARRON® Plus in a tank mix with Dicamba and 2,4-D, or bromoxynil and 2,4-D (such as 3/4 - 1 pint "Buctril" + 1/4 - 3/8 pound active 2,4-D ester). CIMARRON® Plus 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 (refer to the Tank Mixtures section of this label for additional details).

Sunflower (common/volunteer): Apply either CIMARRON® Plus plus surfactant or CIMARRON® Plus 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 5 gallons by ground.

Wild Buckwheat: For best results, apply CIMARRON® Plus 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.

#### SPRAY ADJUVANTS Nonionic Surfactant (NIS)

Apply at a rate (concentration) of 0.25-0.5% v/v (1-2 quarts per 100 gallons spray solution). Use the higher rate in hot and dry conditions to enhance control.

## **Crop Oil Concentrate**

Under dry conditions or during cool weather, a petroleum based crop oil concentrate, or vegetable-seed oil-based product may be used in place of a nonionic surfactant at 1-2 gallon/100 gallons of spray solution (1-2% v/v) to enhance weed control. Use a petroleum-based crop oil concentrate with at least 14% emulsifiers/surfactant and 80% oil.

## **Ammonium Nitrogen Fertilizer**

An ammonium nitrogen fertilizer can be added to a surfactant or a crop oil concentrate to enhance control. Alternatively, a high-quality, sprayable grade of ammonium sulfate (21-0-0) may be used.

## **CROP ROTATION**

## Minimum Rotational Intervals

Minimum rotation intervals\* are determined by the rate of breakdown of CIMARRON® Plus applied. CIMARRON® Plus 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 CIMARRON® Plus breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow

DuPont™ CIMARRON® Plus 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

CIMARRON® Plus 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, CIMARRON® Plus 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 CIMARRON® Plus.

## Checking Soil pH

Before using CIMARRON® Plus, 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 not listed (See 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, or if the minimum cumulative precipitation has not occurred since application.

## **Field Bioassay**

To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with CIMARRON® Plus. Crop response to the bioassay will indicate whether or not to rotate to the crop(s) 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. Before using CIMARRON® Plus, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your wheat or barley acres at the same time.

## Rotational Intervals for Cereals All Areas - Following Use of CIMARRON® PLUS at 0.125 to 0.25 ounces per Acre

Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Winter and spring wheat	7.9 or lower	No restrictions	1
Durum wheat, barley, spring/winter oat	7.9 or lower	No restrictions	10

## Rotation Intervals For Crops in Non-Irrigated Land Following Use of DuPont™ CIMARRON® Plus at 0.125 ounces per Acre

Locat	ion			Minimum Cumulative Precipitation	Minimum Rotation Interval
State	County or Area	Crop	Soil pH	(inches)	(months)
Colorado	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
		IR Corn	7.9 or lower	No restrictions	4
		STS Soybeans	7.9 or lower	No restrictions	4
Kansas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
NAME OF THE PERSON OF THE PERS	Central & Western	Field corn	7.9 or lower	15	12
	Kansas (West of the Flint Hills)	IR Corn	7.9 or lower	15	4
	Western Kansas	Soybeans	7.5 or lower	22	22
	W. of Hwy. 183		7.6–7.9	33	34
	Central Kansas;	Soybeans	7.9 or lower	15	12
	generally E. of Hwy. 183 and W. of the Flinthills	STS Soybeans	7.9 or lower	15	4
New Mexico	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Eastern New Mexico	Cotton (dryland only)	7.9 or lower	30 .	22
Oklahoma	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
		IR Corn STS Soybean	7.9 or lower	No restrictions	4
	Panhandle	Cotton (dryland only)	7.9 or lower	30	22
	E. of the Panhandle	Cotton (dryland only)	7.9 or lower	25	14

## Rotation Intervals For Crops in Non-Irrigated Land (continued) Following Use of DuPont<sup>TM</sup> CIMARRON® Plus at 0.125 ounces per Acre

Loc	cation	Minimum Cumulative Precipitation	Minimum Rotation Interval			
State	County or Area	Crop	Soil pH	(inches)	(months)	
Texas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
	Flax, Safflower, Soybean, Sunflower	7.9 or lower	No restrictions	22		
	Panhandle	Field corn	7.9 or lower	15	12	
N. Central Texas*			Cotton (dryland only)	7.9 or lower	30	22
	Field corn	7.9 or lower	15	12		
		Cotton (dryland only)	7.9 or lower	25	14	

<sup>\*</sup> The counties of N. Central Texas are: Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Delta, Denton, Eastland, Ellis, Falls, Fannin, Foard, Franklin, Grayson, Hardeman, Haskell, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Knox, Lamar, Limestone, McLennan, Milam, Montague, Morris, Nafarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Shackelford, Somervell, Stephens, Tarrent, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood, Young.

## **GRAZING**

There are no grazing restrictions on CIMARRON® Plus.

## IMPORTANT RESTRICTIONS

Treated vegetation may be cut for forage or hay. Coveralls, waterproof gloves, and shoes plus socks must be worn if cutting within 4 hours of treatment.

## 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 CIMARRON® Plus.
- Continue agitation until the CIMARRON® Plus is fully dispersed, at least 5 minutes.
- 4. Once the CIMARRON® Plus is fully dispersed, maintain agitation and continue filling tank with water. CIMARRON® Plus should be thoroughly mixed with water before adding any other material.
- As the tank is filling, add tank mix partners (if desired) then add the necessary volume of spray adjuvants. Always add spray adjuvants last.
- If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
- 7. Apply CIMARRON® Plus spray mixture within 24 hours of mixing to avoid product degradation.
- 8. If CIMARRON® Plus and a tank mix partner are to be applied in multiple loads, pre-slurry the CIMARRON® Plus in clean water prior to adding to the tank. This will

prevent the tank mix partner from interfering with the dissolution of the CIMARRON® Plus.

Do not use CIMARRON® Plus with spray additives that reduce the pH of the spray solution to below 3.0.

## 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 properly calibrate air or ground equipment 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 CIMARRON® Plus in suspension.

## SPRAYER CLEANUP

Spray equipment must be clean before CIMARRON® Plus 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 CIMARRON® Plus** section of this label.

## At the End of the Day

When multiple loads of CIMARRON® Plus 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 DuPont™ CIMARRON® Plus and Before Spraying Crops Other Than Pasture, Rangeland or CRP

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

- 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 gal of household ammonia\* (contains 3% active) for every 100 gal 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) listed 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 DuPont-approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your agricultural dealer, applicator, or DuPont representative for a listing of approved cleaners.

## Notes:

- Attention: Do not use chlorine bleach with ammonia, as dangerous gases will form. Do not clean equipment in an enclosed area.
- Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.
- When CIMARRON® Plus is tank mixed with other pesticides, all required cleanout procedures should be examined and the most rigorous procedure should be followed.
- 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 CIMARRON® Plus and applications of other pesticides to CIMARRON® Plus sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to

CIMARRON® Plus to further reduce the chance of crop injury.

## SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The user is responsible for considering all these factors when making application decisions. Follow the additional precautions below to minimize the potential for spray drift.

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

## **Drift Control Adjuvants**

A drift control adjuvant may be used to reduce the potential for drift. However, because it is the combined physical-chemical properties of all the ingredients in the spray mix that can determine drift potential, the applicator must confirm that the drift control adjuvant used is having the desired effect with the tank mix that is being applied. If a drift control adjuvant is used, follow the use directions and precautions on the manufacturer's label. Do not use an adjuvant which increases viscosity with application systems that cannot accommodate viscous sprays.

Ground Application: With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible (i.e., a release height of 4 feet or less above the application target); by applying 10 gallons or more of spray per acre; by keeping the operating spray pressures at the manufacturer's recommended minimum pressures for the specific nozzle type used; and by spraying when the wind velocity is low (follow all applicable state regulations).

Do not make ground applications within a surface temperature inversion when applying near an area requiring protection to avoid an unreasonable adverse effect. Applicators may determine presence of an inversion by noting the presence of ground fog, light variable wind, or layering of smoke and dust. Be particularly alert to the potential for a surface temperature inversion when winds are calm.

Direct the sprays no higher than the tops of target vegetation, and maintain spray pressures at levels which provide coarse to very coarse spray droplets to minimize drift.

**Aerial Application**: The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

- 1. The distance between the outer most operating nozzles on the boom must not exceed 75% of the wingspan. For helicopters, use a boom length and position that prevents droplets from entering the rotor vortices.
- 2. Nozzles should always point backward parallel with the air stream.

Where states have more stringent regulations, they must be observed. The applicator should be familiar with and take into account the information presented below.

## IMPORTANCE OF DROPLET SIZE

Since the most effective way to reduce drift potential is to apply large droplets, equipment producing a coarse to very coarse droplet spectrum must be used when applying this product. The best drift management strategy is to apply the coarsest drop size spectrum that provides 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 "SURFACE TEMPERATURE INVERSIONS" sections of this label.

## Controlling Droplet Size - Ground Application

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Do not exceed the manufacturer's recommended pressures. Use the lower spray pressures recommended for the nozzle. Higher pressure generally 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 according to manufacturer's specifications which is designed for the intended application, and that produces a coarse to very coarse droplet size spectrum. With most nozzle types, narrower spray angles produce larger droplets. To further reduce drift, low-drift or drift reducing nozzles should be used.

## Controlling Droplet Size - Aircraft

- Number of Nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation For some nozzle types, such as solid streams, orienting nozzles so that the spray is emitted backwards, parallel to the air stream minimizes the effects of air shear and will produce a coarser droplet spectrum than other orientations. For applications of this product, nozzles must be oriented in a manner that results in the application of a coarse to very coarse droplet size spectrum.
- Nozzle Type Use a nozzle type according to manufacturer's specifications which is designed for the intended application.
   With most nozzle types, narrower spray angles produce larger droplets. Solid stream and other drift reducing nozzles should be used.

## **BOOM LENGTH AND HEIGHT**

- Boom Height (ground) Setting the boom at the lowest referenced height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce. Apply at a height no greater than 4 feet above the top of the largest plants.
- Application Height (aircraft) Apply at a height no greater than 10 feet above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.
- Boom Length (aircraft) The distance between the outermost operating nozzles on the boom must not exceed 3/4 (75%) of the wingspan - longer booms increase drift potential.

For helicopters, use a boom length and position that prevents droplets from entering the rotor vortices.

#### SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the application equipment upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

## WIND (GROUND AND AERIAL APPLICATION)

Drift potential is lowest with a sustained wind of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given wind speed. Application should be avoided during gusty conditions, and when winds are below 2 mph due to variable wind direction and high potential for a temperature inversion. Avoid applying during calm conditions which may be conducive to air inversions.

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 (GROUND AND AERIAL APPLICATIONS)

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## SURFACE TEMPERATURE INVERSIONS (GROUND AND AERIAL APPLICATIONS)

Applications must not occur during a local, surface temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds which are common during inversions. Temperature inversions are characterized by increasing temperatures with height 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 the 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 (GROUND APPLICATION)

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.

Do not apply this product in a way that will contact workers or other people, either directly or through drift. Only protected handlers may be in the area during application.

## SENSITIVE AREAS

This product should be applied only 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 the sensitive areas). Small quantities of spray may seriously injure susceptible crops either during active growth periods or dormancy.

## **WEED RESISTANCE**

DuPont™ CIMARRON® Plus, which contains the active ingredients, metsulfuron methyl and chlorsulfuron, is a Group 2 herbicide based on the mode of action classification system of the Weed Science Society of America. When herbicides with mode of action classifications that affect the same biological sites of action are used repeatedly over several years to control the same weed species in the same treatment area, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that area. 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 biological 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 such as retreatment, tank-mix partners and/or sequential herbicide applications that affect a different site of action. Weed escapes that are allowed to go to seed, and movement of plant material between treatment areas on equipment 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 to determine appropriate actions for treating specific resistant weed biotypes 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.

## IMPORTANTS RESTRICTIONS

- Injury to or loss of desirable trees or vegetation may result from failure to observe the following:
- Do not apply CIMARRON® Plus, 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, 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 contaminate irrigation ditches or water used for domestic purposes.
- Do not apply to irrigated land where the tailwater will be used to irrigate crops.
- Do not apply to frozen or snow covered ground as surface runoff may occur.
- Treatment of powdery, dry soil or light, sandy soil when there is little likelihood of rainfall soon after treatment may result in off target movement and possible damage to susceptible crops when soil particles are moved by wind or water. Injury to crops may result if treated soil is washed, blown, or moved onto land used to produce crops. Injury may be more severe when the crops are irrigated. Do not apply CIMARRON® Plus when these conditions are identified and powdery, dry soil or light or sandy soil are known to be prevalent in the area to be treated.
- If tank-mixing or sequentially applying products containing metsulfuron methyl, do not apply more than the equivalent of 1 ounce of metsulfuron methyl active ingredient acre per year.
- If tank-mixing or sequentially applying products containing chlorsulfuron, do not apply more than the equivalent of 1 ounce of chlorsulfuron active ingredient per acre per year.

## IMPORTANTS PRECAUTIONS

- CIMARRON® Plus may cause injury to desirable trees and plants when contacting their roots, stems or foliage. These plants are most sensitive to CIMARRON® Plus during their development or growing stage.
- 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 CIMARRON® Plus to a small area. Components in a grass seed mixture will vary in tolerance to CIMARRON® Plus so the final stand may not reflect the seed ratio.
- Under certain conditions such as heavy rainfall, high pH, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after CIMARRON® Plus application, temporary discoloration and/or grass injury may occur. CIMARRON® Plus 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 CIMARRON® Plus to pastures, rangeland or CRP undersown with legume crops may cause severe injury to the legumes. Legumes in a seeding mixture may be severely injured or killed following an application of CIMARRON® Plus.

- Applications made where runoff water flows onto agricultural land may injure crops. Applications made during periods of intense rainfall, to soils saturated with water, or soils through which rainfall will not readily penetrate may result in runoff and movement of DuPont™ CIMARRON® Plus. Treated soil should be left undisturbed to reduce the potential for CIMARRON® Plus movement by soil erosion due to wind or water.
- For ground applications applied to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced.
- Avoid disturbing (e.g. cultivating or mowing) treated areas for at least 7 days following application.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by 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:** Wastes resulting from the use of this product must 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>TM</sup> CIMARRON® Plus herbicide containing metsulfuron methyl and chlorsulfuron 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 CIMARRON® Plus herbicide containing metsulfuron methyl and chlorsulfuron 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.

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## D-1760MSTR 110112

## LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

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

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

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

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

For product information call: 1-888-6-DUPONT [1-888-638-7668]
Internet address: www.cropprotection.dupont.com
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**DuPont Crop Protection** 

## ACCEPTED

NOV 1 3 2012

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 352-670

SUPPLEMENTAL LABELING

DUPONT™ CIMARRON® PLUS HERBICIDE

BROADLEAF WEED CONTROL IN WHEAT, BARLEY AND FALLOW IN CO, KS, NM, OK AND TX

## DUPONT'M CIMARRON® PLUS HERBICIDE

EPA REG. NO. 352-670

# BROADLEAF WEED CONTROL IN WHEAT, BARLEY AND FALLOW IN THE STATES OF COLORADO, KANSAS, NEW MEXICO, OKLAHOMA AND TEXAS

This supplemental label expires October 1, 2015 and must not be used or distributed after this date.

## 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.)

## **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 State or Tribal agency responsible for pesticide regulation.

CIMARRON® PLUS may be applied alone for control of emerged broadleaf weeds post-emergence, or in combination with other suitable registered herbicides for wheat, barley and fallow. Read and follow all manufacturers label instructions for the companion herbicide. If those instructions conflict with this label, do not tank mix the herbicide with CIMARRON® PLUS. If another herbicide is tank mixed with CIMARRON® PLUS to increase the broadleaf weed spectrum, select adjuvants based on the adjuvant limitations of the companion herbicide. Effectiveness may be reduced if rainfall occurs within 4 hours after application. Unless otherwise directed, treat when weeds are less than 4" tall or in diameter and are actively growing.

## WHEAT and BARLEY

## Use Rates

0.125 ounces per acre. Include a nonionic surfactant.

## **Application Timing**

Do not apply during boot and early heading, as crop injury may result. Maximum of one application per growing season.

## Irrigated Wheat and Barley

Make applications after the crop begins tillering but before boot.

First post-treatment irrigation should be delayed for at least 3 days after treatment and should not exceed 1 inch of water.

## **Dryland Wheat and Barley**

Make applications after the crop is in the 2-leaf stage but before boot.

## **FALLOW**

#### Use Rates

Use 0.125 to 0.25 ounces per acre. Include a nonionic surfactant, petroleum based crop oil concentrate, or vegetable-seed oilbased product (methylated seed oils are considered a vegetable seed-based oil).

When using more than 0.125 ounces per acre, the fallow area is best planted to cereals (a field bioassay must be completed before rotating to any other crop). See CROP ROTATION for more information.

## **Application Timing**

CIMARRON® PLUS may be used as a fallow treatment any time from the the spring through the fall when the majority of weeds have emerged and are actively growing.

## WEEDS CONTROLLED

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

Blue/purple mustard\* Shepherd's purse Flixweed\* Smallseed falseflax\* Groundsel (common) Bur buttercup (testicu-Henbit Smartweed (green, Coast fiddleneck Kochia\* ladysthumb, pale) Lambsquarters (tarweed) Snow speedwell (common, slimleaf) Common chickweed Tansymustard\* Mayweed chamomile Treacle mustard\* Common purslane Miners lettuce Conical catchfly (Bushy Wallflower) Pigweed (redroot, Cowcockle Tumble/Jim Hill smooth, tumble) False chamomile mustard Plains coreopsis Volunteer sunflower Field pennycress Prickly lettuce\* (fanweed) Waterpod Russian thistle\* Wild mustard Filaree

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## Weeds Suppressed ‡\*

Canada thistle\*
Common sunflower\*
Corn gromwell\*

Knotweed (prostrate)\* Sowthistle (annual)\* Wild buckwheat\*

## \* 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

Blue Mustard, Treacle Mustard, Flixweed, Small seeded falseflax, and Tansymustard: For best results, apply CIMARRON® PLUS tank mixtures with 2,4-D or MCPA postemergence to mustards, but before bloom. For Tansy mustard, Flixweed, Treacle mustard and Small seeded falseflax control, apply 0.1 ounces of CIMARRON® PLUS plus 1/4 pound active 2,4-D ester. If only Tansy mustard, Flixweed or Treacle mustard are present, apply 0.083 ounces of CIMARRON® PLUS plus 1/4 pound active 2,4-D ester for control.

Canada Thistle and Sowthistle: Apply CIMARRON® PLUS plus surfactant or CIMARRON® PLUS 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 the crop.

Corn Gromwell and Prostrate Knotweed: Apply DuPont<sup>TM</sup> CIMARRON® PLUS plus surfactant 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 CIMARRON® PLUS can improve results.

Kochia, Russian thistle, Prickly lettuce: Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use CIMARRON® PLUS in a tank mix with Dicamba and 2,4-D, or bromoxynil and 2,4-D (such as 3/4 - 1 pint "Buctril" + 1/4 - 3/8 pound active 2,4-D ester). CIMARRON® PLUS 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 (refer to the Tank Mixtures section of this label for additional details).

**Sunflower (common/volunteer):** Apply either CIMARRON® PLUS plus surfactant or CIMARRON® PLUS 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 5 gallons by ground.

Wild Buckwheat: For best results, apply CIMARRON® PLUS 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.

## SPRAY ADJUVANTS Nonionic Surfactant (NIS)

Apply at a rate (concentration) of 0.25-0.5% v/v (1-2 qt per 100 gal spray solution). Use the higher rate in hot and dry conditions to enhance control.

## **Crop Oil Concentrate**

Under dry conditions or during cool weather, a petroleum based crop oil concentrate, or vegetable-seed oil-based product may be used in place of a nonionic surfactant at 1-2 gallon/100 gal of spray solution (1-2% v/v) to enhance weed control. Use a petroleum-based crop oil concentrate with at least 14% emulsifiers/surfactant and 80% oil.

## **Ammonium Nitrogen Fertilizer**

An ammonium nitrogen fertilizer can be added to a surfactant or a crop oil concentrate to enhance control. Alternatively, a high-quality, sprayable grade of ammonium sulfate (21-0-0) may be used.

#### **CROP ROTATION**

#### Minimum Rotational Intervals

Minimum rotation intervals\* are determined by the rate of breakdown of CIMARRON® PLUS applied. CIMARRON® PLUS 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 CIMARRON® PLUS breakdown in soil, while high soil pH, low soil temperature, and low soil moisture slow CIMARRON® PLUS 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

CIMARRON® PLUS 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, CIMARRON® PLUS 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 CIMARRON® PLUS.

## Checking Soil pH

Before using CIMARRON® PLUS, 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 not listed (See 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, or if the minimum cumulative precipitation has not occurred since application.

## **Field Bioassay**

To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with CIMARRON® PLUS. Crop response to the bioassay will indicate whether or not to rotate to the crop(s) 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. Before using CIMARRON® PLUS, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your wheat or barley acres at the same time.

## Rotational Intervals for Cereals All Areas - Following Use of DuPont™ CIMARRON® PLUS at 0.125 to 0.25 ounces per Acre

Сгор	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Winter and spring wheat (except durum) Durum wheat, barley, spring/ winter oat	7.9 or lower 7.9 or lower	No restrictions No restrictions	1 10

## Rotational Intervals for Crops in Non-Irrigated Land Following Use of CIMARRON® PLUS at 0.125 ounces per Acre

Locati	ion			Minimum Cumulative Precipitation	Minimum Rotation Interval	
State	County or Area	Crop	County or Area Crop Soil pH	Soil pH	(inches)	(months)
Colorado	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22	
		Field corn	7.9 or lower	15	12	
		IR Corn	7.9 or lower	No restrictions	4	
		STS Soybeans	7.9 or lower	No restrictions	4	
Kansas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22	
	Central & Western	Field corn	7.9 or lower	15	12	
	Kansas (West of the Flint Hills)	IR Corn	7.9 or lower	15	4	
	Western Kansas	Soybeans	7.5 or lower	22	22	
	W. of Hwy. 183		7.6–7.9	33	34	
	Central Kansas;	Soybeans	7.9 or lower	15	12	
	generally E. of Hwy. 183 and W. of the Flinthills	STS Soybeans	7.9 or lower	15	4	
New Mexico	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22	
	Eastern New Mexico	Cotton (dryland only)	7.9 or lower	30	22	
Oklahoma	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10	
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22	
		Field corn	7.9 or lower	15	12	
		IR Corn STS Soybean	7.9 or lower	No restrictions	4	
	Panhandle	Cotton (dryland only)	7.9 or lower	30	22	
	E. of the Panhandle	Cotton (dryland only)	7.9 or lower	25	14	

Loc	cation	Minimum Cumulative Precipitation	Minimum Rotation Interval		
State	County or Area	Crop	Soil pH	(inches)	(months)
Texas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
	Flax, Safflower, Soybean, Sunflower	7.9 or lower	No restrictions	22	
No. of the	Panhandle	Field corn	7.9 or lower	15	12
	Cotton (dryland only)	7.9 or lower	30	.22	
		N. Central Texas*	Field corn	7.9 or lower	15
		Cotton (dryland only)	7.9 or lower	25	14

<sup>\*</sup> The counties of N. Central Texas are: Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Delta, Denton, Eastland, Ellis, Falls, Fannin, Foard, Franklin, Grayson, Hardeman, Haskell, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Knox, Lamar, Limestone, McLennan, Milam, Montague, Morris, Nafarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Shackelford, Somervell, Stephens, Tarrent, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood, Young.

## GRAZING

There are no grazing restrictions on DuPont™ CIMARRON® PLUS.

#### IMPORTANT RESTRICTIONS

Treated vegetation may be cut for forage or hay. Coveralls, waterproof gloves, and shoes plus socks must be worn if cutting within 4 hours of treatment.

## **IMPORTANT**

BEFORE USING CIMARRON® PLUS, READ AND CAREFULLY NOTE THE CAUTIONARY STATE-MENTS AND OTHER PROCEDURAL INFORMATION APPEARING ON THE EPA REGISTERED LABEL OR ON OTHER SUPPLEMENTAL LABELS. FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS.

This label contains new or supplemental instructions for use of this product which do not appear on the EPA-registered package label. Follow the instructions carefully. This labeling must be in the possession of the user at the time of pesticide application.

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