



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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

OCT -9 2008

Mr. Edward T. Bockrath  
E.I. DuPont de Nemours & Company  
DuPont Crop Protection  
Stine-Haskell Research Center  
P. O. Box 30  
Newark, DE 19714-0030

Dear Mr. Bockrath:

Subject: DuPont Harmony Extra XP Herbicide (Revise Grazing based on Recent Tolerances)  
EPA Registration No. 352-611  
Label Submitted July 30, 2008

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable provided you make the following changes before you release the product for shipment.

1. Delete the word "**recommended**" from the first sentence of the first paragraph beneath the Agricultural Use Requirements box.
2. Revise the second paragraph beneath the Agricultural Use Requirements box to read "DuPont will not be responsible...in any manner not **specified** by DuPont."
3. On page 3, under "Weeds Partially Controlled", the second footnote, revise the second sentence to read "For best results, use the highest **labeled** rate of Harmony XP..."
4. There are several areas of the label where the sentences "Read and follow all manufacturers label recommendations... If those recommendations conflict ..." appear. Modify these sentences by replacing the word "recommendations" with the word "**instructions**".

Submit one (1) copy of your final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling supersedes all previously approved ones. A stamped copy of labeling is enclosed for your records.

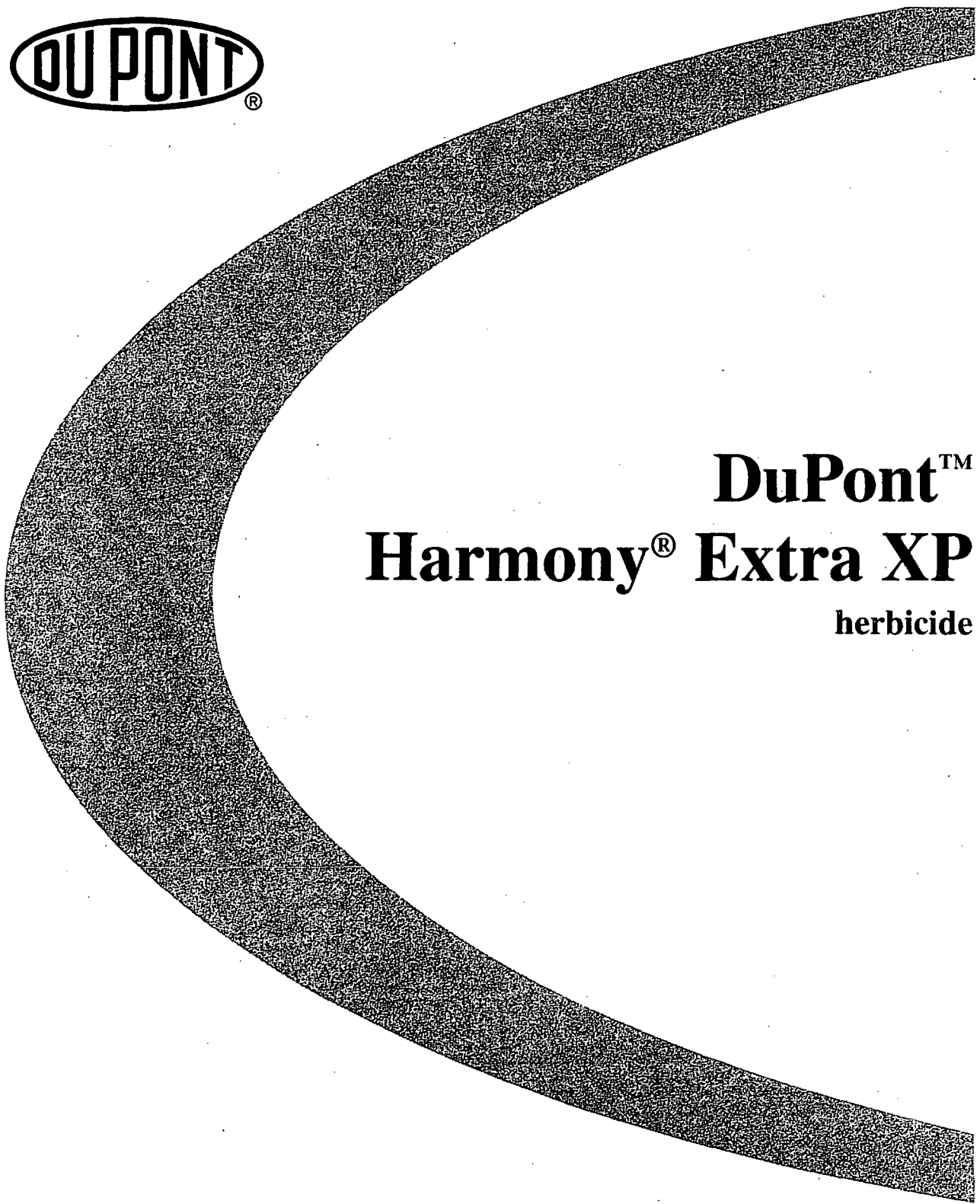
Sincerely,

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



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2/1-



**DuPont™**  
**Harmony® Extra XP**  
herbicide

**DRAFT LABEL**

# DUPONT™ HARMONY® EXTRA XP HIGHLIGHTS

- *For selective postemergence broadleaf weed control in Wheat (including durum), Barley, Oat, Triticale and Fallow*
- *Apply at the rate of 0.3 to 0.6 ounce per acre on Wheat, Barley, Triticale and Fallow, 0.3 to 0.4 ounce per acre on Oat (see Application Information).*
- *Apply after the crop is in the 2-leaf stage, but before the flag leaf is visible on Wheat, Barley, Triticale and Winter Oat. On Spring Oat, apply after the crop is in the 3 leaf stage, but before jointing.*
- *May be applied by ground or by air.*
- *Use in tank mixtures with other registered herbicides for broader spectrum weed control (see Tank Mixtures).*
- *Rotate to Wheat, Barley, Triticale and Oat anytime. Rotate to Cotton after 14 days. Rotate to Sugarbeets, Winter Rape and Canola after 60 days. Rotate to any other crop after 45 days.*
- *Consult label text for complete instructions. Always read and follow label "Directions For Use".*

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ACCEPTED  
with COMMENTS  
In EPA Letter Dated



# DuPont™ Harmony® Extra XP herbicide

OCT -9 2008

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 352-611

Dry flowable

For Use on Wheat (including durum),  
Barley, Oat, Triticale and Fallow

Active Ingredients	By Weight
Thifensulfuron-methyl Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl) amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate	50%
Tribenuron-methyl Methyl 2-[[[N-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl]amino]sulfonyl]benzoate	25%
<b>Inert Ingredients</b>	25%
<b>TOTAL</b>	100%

EPA Reg. No. 352-611

## 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.

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

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION!** Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

### PERSONAL PROTECTIVE EQUIPMENT

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

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber) ≥14 mls.
- Shoes plus socks.

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

### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

### ENVIRONMENTAL HAZARDS

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

### PESTICIDE HANDLING

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

## 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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls.

Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber) ≥14 mls.

Shoes plus socks.

DuPont™ HARMONY® EXTRA XP is recommended for use on wheat, barley, oat, triticale, and fallow in most states, check with your state extension or Dept. of Agriculture before use, to be certain HARMONY® EXTRA XP is registered in your state.

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

### GENERAL INFORMATION

HARMONY® EXTRA XP herbicide is a dry flowable granule that is used for selective postemergence weed control in wheat (including durum), barley, oat, triticale and fallow. The best control is obtained when HARMONY® EXTRA XP is applied to young, actively growing weeds. The use rate will depend on weed spectrum and size of weed at time of application. The degree and duration of control may depend on the following:

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

HARMONY® EXTRA XP is noncorrosive, nonflammable, nonvolatile, and does not freeze. HARMONY® EXTRA XP should be mixed in water and applied as a uniform broadcast spray.

## ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

HARMONY® EXTRA XP is absorbed primarily through the foliage of plants, rapidly inhibiting the growth of susceptible weeds. One to 3 weeks after application to weeds (2 to 5 weeks for wild garlic), leaves of susceptible plants appear chlorotic, and the growing point subsequently dies.

HARMONY® EXTRA XP provides the best control in vigorously growing crops that shade competitive weeds. Weed control in areas of thin crop stand or seeding skips may not be as satisfactory. However, a crop canopy that is too dense at application can intercept spray and reduce weed control.

The herbicidal action of HARMONY® EXTRA XP may be affected in crops stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, cultural practices, or variations in crop variety. In warm, moist conditions, the expression of herbicide symptoms is accelerated; in cold, dry conditions, expression of herbicide symptoms is delayed. In addition, weeds hardened-off by drought stress are less susceptible to HARMONY® EXTRA XP.

### WEEDS CONTROLLED - ALL USES

HARMONY® EXTRA XP effectively controls the following weeds when used according to label directions:

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| Annual knawel                        | Marshelder                      |
| Annual sowthistle                    | Mayweed chamomile               |
| Black mustard                        | Miners lettuce                  |
| Blue/Purple mustard                  | Narrowleaf lambsquarters        |
| Broadleaf dock                       | Nightflowering catchfly         |
| Bur buttercup                        | Pennsylvania smartweed          |
| Bushy wallflower/<br>Treatle mustard | Pineappleweed                   |
| Clasping pepperweed                  | Prickly lettuce *               |
| Coast fiddleneck                     | Prostrate knotweed              |
| Common buckwheat                     | Prostrate pigweed               |
| Common chickweed                     | Redmaids                        |
| Common cocklebur *                   | Redroot pigweed                 |
| Common groundsel                     | Russian thistle *               |
| Common lambsquarters                 | Scentless chamomile/<br>mayweed |
| Common radish                        | Shepherd's-purse                |
| Common ragweed *                     | Slimleaf lambsquarters          |
| Common sunflower                     | Smallflower buttercup           |
| Corn chamomile                       | Smallseed falseflax             |
| Corn gromwell*                       | Stinking chickweed              |
| Corn spurry                          | Stinking mayweed/<br>dogfennel  |
| Cowcockle                            | Swinecress                      |
| Cress (mouse-ear)                    | Tansymustard                    |
| Curly dock                           | Tarweed fiddleneck              |
| False chamomile                      | Tumble/ Jim Hill mustard        |
| Field chickweed                      | Volunteer lentils               |
| Field pennycress                     | Volunteer peas                  |
| Filaree (redstem, Texas)             | Volunteer sunflower             |
| Flixweed                             | Wild buckwheat*                 |
| Green smartweed                      | Wild chamomile                  |
| Henbit                               | Wild garlic*                    |
| Kochia *                             | Wild mustard                    |
| Ladysthumb                           | Wild radish*                    |
| Lanceleaf sage *                     |                                 |
| London rocket                        |                                 |

## **WEEDS PARTIALLY CONTROLLED\*\***

DuPont™ HARMONY® EXTRA XP partially controls the following weeds when used according to label directions:

Canada thistle*	Mallow (common, little)
Carolina geranium	Nightshade (cutleaf, hairy)
Catchweed bedstraw	Veich* (common, hairy)
Cutleaf eveningprimrose	

\* See SPECIFIC WEED PROBLEMS for more information.

\*\*Partial control: A visual reduction of weed population as well as a significant loss of vigor. For better results, use the highest recommended rate of HARMONY® EXTRA XP per acre and include a tank mix partner such as 2,4-D, MCPA, "Buctril" or "Banvel"/"Banvel" SGF/"Clarity" (refer to TANK MIXTURES).

## **FALLOW**

### **APPLICATION INFORMATION**

#### **USE RATE**

Apply 0.3 to 0.6 oz HARMONY® EXTRA XP per acre to fallow. Two applications of HARMONY® EXTRA XP may be made provided the total amount applied does not exceed 1.0 oz per acre per crop season.

HARMONY® EXTRA XP should be applied in combination with other suitable registered fallow herbicides such as "Landmaster II", "Fallow Master", "Roundup" plus 2,4-D (ester formulations work best), "Roundup" plus "Banvel"/"Banvel" SGF/"Clarity", 2,4-D, "Banvel"/"Banvel" SGF/"Clarity".

#### **APPLICATION TIMING**

HARMONY® EXTRA XP may be used as a fallow treatment, in the spring or fall when the majority of weeds have emerged and are actively growing.

#### **TANK MIXTURES IN FALLOW**

HARMONY® EXTRA XP may be used as a fallow treatment, and should be tank mixed with other herbicides that are registered for use in fallow.

Read and follow all manufacturer's label recommendations for the companion herbicide. If those recommendations conflict with this label, do not tank mix the herbicide with HARMONY® EXTRA XP.

#### **PRE-PLANT BURNDOWN**

### **APPLICATION INFORMATION**

#### **USE RATE**

*Wheat (including durum), Barley, Triticale and Oat*

Apply 0.3 to 0.6 oz HARMONY® EXTRA XP per acre as a burndown treatment to wheat (including durum), barley, triticale, and oat to control emerged weeds prior to, or shortly after planting (prior to emergence). Make applications when the majority of weeds have emerged and are actively growing.

*Cotton*

Apply 0.3 to 0.5 oz HARMONY® EXTRA XP per acre as a burndown treatment to cotton. Allow at least 14 days between application of HARMONY® EXTRA XP and planting of cotton. Include a nonionic surfactant, petroleum based crop oil concentrate, or vegetable-seed oil-based product (methylated seed oils are considered a vegetable

seed-based oil). If another herbicide is tank mixed with HARMONY® EXTRA XP to increase the broadleaf weed spectrum, select adjuvants based on the adjuvant limitations of the companion herbicide.

#### **Sugarbeets, Winter Rape and Canola**

Apply 0.3 to 0.6 oz HARMONY® EXTRA XP per acre as a burndown treatment to sugarbeets, winter rape and canola. Allow at least 60 days between application of HARMONY® EXTRA XP and planting of sugarbeets, winter rape and canola.

#### **Any other crop (such as corn, rice, grain sorghum or soybeans)**

Apply 0.3 to 0.6 oz HARMONY® EXTRA XP per acre as a burndown treatment to any other crop (such as corn, rice, grain sorghum or soybeans). Allow at least 45 days between application of HARMONY® EXTRA XP and planting of any other crop (such as corn, rice, grain sorghum or soybeans).

Sequential treatments of HARMONY® EXTRA XP may also be made provided the total amount of HARMONY® EXTRA XP applied during one fallow/pre-plant cropland season does not exceed 1.0 ounce per acre; for example, 0.5 ounce in the fall followed by 0.5 ounce in the spring.

Use the 0.6 ounce per acre rate when weed infestation is heavy and predominantly consists of those weeds listed under PARTIAL CONTROL, or when application timing and environmental conditions are marginal.

(See APPLICATION TIMING Section for restriction on planting intervals.)

#### **TANK MIXTURES IN PRE-PLANT BURNDOWN**

HARMONY® EXTRA XP may be used as a pre-plant burndown treatment alone or tank mixed with other herbicides that are registered for use as a pre-plant burndown product, such as "Landmaster II", "Fallow Master", "Roundup" plus "Banvel"/"Banvel" SGF/"Clarity", or "Banvel"/"Banvel" SGF/"Clarity" alone.

Read and follow all manufacturer's label recommendations for the companion herbicide. If those recommendations conflict with this label, follow the most restrictive labeling (such as planting interval after application), or do not tank mix the herbicide with HARMONY® EXTRA XP.

#### **CEREALS**

### **APPLICATION INFORMATION**

#### **USE RATE**

Do not use less than 0.3 ounce HARMONY® EXTRA XP per acre.

*Wheat (including Durum), Barley and Triticale*

Apply 0.3 to 0.6 oz HARMONY® EXTRA XP per acre to wheat (including durum), barley or triticale. Two applications of HARMONY® EXTRA XP may be made provided the total amount applied does not exceed 1.0 oz per acre per crop season.

Use 0.3 to 0.4 oz HARMONY® EXTRA XP per acre for light infestation of the weeds listed under Weeds Controlled.

Conditions at application should be optimum for effective treatment of these weeds.

Use 0.5 oz DuPont™ HARMONY® EXTRA XP per acre for heavy infestation of the weeds listed under Weeds Partially Controlled.

Use 0.6 oz HARMONY® EXTRA XP per acre for heavy infestation of the weeds listed under Weeds Partially Controlled when application timing and environmental conditions are marginal (refer to Environmental Conditions and Biological Activity for best performance).

#### **Oat (Spring and Winter)**

Apply 0.3 to 0.4 ounce HARMONY® EXTRA XP per acre for control of the weeds listed in Weeds Controlled table. Do not make more than one application of HARMONY® EXTRA XP per crop season on oat.

### **APPLICATION TIMING**

#### **Wheat (Including Durum), Barley, Winter Oat and Triticale**

Make applications after the crop is in the 2-leaf stage, but before the flag leaf is visible.

#### **Spring Oat**

Make applications after the crop is in the 3 leaf stage, but before jointing.

Do not use on "Ogle", "Porter" or "Premier" varieties as crop injury can occur.

Since HARMONY® EXTRA XP has very little or no soil activity, it controls only those weeds that have germinated; therefore, apply HARMONY® EXTRA XP when all or most of the weeds have germinated. Annual broadleaf weeds should be past the cotyledon stage, actively growing, and less than 4" tall or wide. Wild garlic plants should be less than 12" tall with 2" to 4" of new growth. See Specific Weed Problems for more information.

Rainfall immediately after treatment can wash HARMONY® EXTRA XP off of weed foliage, resulting in reduced weed control. Several hours of dry weather are needed to allow HARMONY® EXTRA XP to be sufficiently absorbed by weed foliage.

### **SPECIFIC WEED PROBLEMS - CEREALS**

**Canada thistle:** For control in wheat, barley and triticale, use 0.6 oz per acre plus surfactant when all thistles are 4" to 8" with 2" to 6" of new growth. Make the application in the spring. Control will be improved by using HARMONY® EXTRA XP in combination with 2,4-D (refer to TANK MIXTURES).

For control in oat, use 0.4 ounce HARMONY® EXTRA XP per acre plus 2,4-D (refer to TANK MIXTURES)

**Common cocklebur, Common ragweed, Lanceleaf sage:** In wheat, barley and triticale, apply HARMONY® EXTRA XP at 0.4 to 0.5 ounce per acre in combination with 2, 4-D at rates from 1/4 to 3/8 lb active ingredient (ester formulations work best) when weeds are small and actively growing. When using 1/4 lb active ingredient of 2, 4-D, be sure to add surfactant at the rate of 1/4 to 1/2 quart per 100 gallons of spray solution (0.06 to 0.125% v/v--use the higher rate under stress conditions).

For control in oat, use 0.4 ounce HARMONY® EXTRA XP per acre plus 2,4-D. Refer to the Tank Mixtures sections of this label for additional details.

**Corn growwell, Wild buckwheat:** For control in wheat, barley and triticale, use 0.5 to 0.6 ounce HARMONY® EXTRA XP per acre plus surfactant.

For control in oat, use 0.4 ounce HARMONY® EXTRA XP per acre plus 2,4-D, MCPA or "Buctril" (refer to TANK MIXTURES).

**Kochia, Russian thistle, Prickly lettuce:** Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use HARMONY® EXTRA XP in a tank mix with dicamba (such as "Banvel"/"Banvel" SGF/"Clarity") and 2, 4-D; or Bromoxynil (such as "Buctril") and 2,4-D (3/4 - 1 pt "Buctril" + 1/4 - 3/8 lb active ingredient 2, 4-D ester). HARMONY® EXTRA XP should be applied in the spring when weeds are less than 2" tall or 2" across and are actively growing. Refer to the Tank Mixtures section of this label for additional details.

**Vetch (common and hairy):** For control in wheat, barley and triticale, use 0.5 to 0.6 oz of HARMONY® EXTRA XP per acre plus surfactant when vetch is less than 6" in length. For severe infestations of vetch, or when vetch is greater than 6" in length, use HARMONY® EXTRA XP in combination with 2,4-D or MCPA (refer to the Tank Mixtures section of this label).

For control in oat, use 0.4 ounce HARMONY® EXTRA XP per acre plus 2,4-D or MCPA (refer to TANK MIXTURES).

**Wild garlic:** For control in wheat, barley and triticale, use 0.5 to 0.6 oz HARMONY® EXTRA XP per acre plus surfactant when wild garlic plants are less than 12" tall with 2" to 4" of new growth. For severe infestations, use the 0.6 ounce per acre rate of HARMONY® EXTRA XP. Plants hardened-off by cold weather and/or drought stress may be more difficult to control. Thorough spray coverage of all garlic plants is essential. Typical symptoms of dying garlic plants may not be noticeable for 2 to 5 weeks.

For control in oat, use 0.4 ounce HARMONY® EXTRA XP per acre plus 2,4-D or MCPA (refer to TANK MIXTURES).

**Wild radish:** For best results in wheat, barley and triticale, apply 0.4 to 0.6 ounce HARMONY® EXTRA XP per acre plus surfactant either in the fall or spring to wild radish rosettes less than 6 inches in diameter. Applications made later than 30 days after weed emergence will result in partial control. For increased control of severe wild radish infestations, or wild radish emerged greater than 30 days, apply HARMONY® EXTRA XP at 0.3 ounce per acre in combination with MCPA at 1/4 lb active ingredient per acre. Surfactant is required when tank mixing with MCPA, add 1 quart per 100 gallons of spray solution (0.25% vol/vol). Fall applications should be made prior to hardening off of plants.

For control in oat, use 0.4 ounce HARMONY® EXTRA XP per acre plus 2,4-D or MCPA (refer to TANK MIXTURES).

### **TANK MIXTURES - CEREALS**

HARMONY® EXTRA XP may be tank mixed with other suitable registered herbicides to control weeds listed as suppressed, weeds resistant to HARMONY® EXTRA XP or weeds not listed under **Weeds Controlled**. Read and follow all manufacturer's label recommendations for the companion

herbicide. If those recommendations conflict with this label, do not tank mix the herbicide with DuPont™ HARMONY® EXTRA XP.

HARMONY® EXTRA XP can also be mixed with registered fungicides, insecticides, or liquid fertilizer for use on wheat, barley, triticale, oat, or fallow.

**With 2,4-D (amine or ester) or MCPA (amine or ester)**

HARMONY® EXTRA XP may be tank mixed with the amine and ester formulations 2,4-D and MCPA herbicides for use on wheat, barley, triticale and oat.

For best results in the Red River Valley and adjacent areas of North Dakota and Minnesota, add the ester formulations of 2,4-D or MCPA herbicides to the tank at 3/8 lb active ingredient (such as 3/4 pt of a 4 lb/gal product, 1/2 pt of a 6 lb/gal product). No additional surfactant is needed with this mixture.

For best results in other areas, add the ester formulations of 2,4-D or MCPA herbicides to the tank at 1/4 to 3/8 lb active ingredient (such as 1/2 - 3/4 pt of a 4 lb/gal product, 1/3 - 1/2 pt of a 6 lb/gal product). Surfactant may be added to the mixture at 1/2 to 1 qt per 100 gal of spray solution (0.125 to 0.25% v/v); however, adding surfactant may increase the potential for crop injury, especially at the higher phenoxy rates.

Higher rates of 2,4-D or MCPA may be used, but do not exceed the highest rate allowed by those respective labels. Read and follow all label instructions on timing, precautions, and warnings for these herbicides before using these tank mixtures.

**With dicamba (such as "Banvel"/"Banvel" SGF/"Clarity")**

HARMONY® EXTRA XP may be tank mixed with 1/16 to 1/8 lb active ingredient dicamba (such as 2-4 fluid oz "Banvel", 4-8 fluid oz "Banvel" SGF, 2-4 fluid oz "Clarity"). Use higher rates when weed infestation is heavy. Surfactant may be added to the mixture at 1/2 to 1 qt per 100 gal of spray solution (0.125 to 0.25% v/v); however, adding surfactant may increase the potential for crop injury. Refer to the specific dicamba label for application timing and restrictions.

Tank mixes of HARMONY® EXTRA XP plus dicamba may result in reduced control of some broadleaf weeds.

**With 2,4-D (amine or ester) and "Banvel"/"Clarity"**

HARMONY® EXTRA XP may be applied in a 3-way tank mix with formulations of dicamba and 2,4-D. Make application of HARMONY® EXTRA XP + 1/16 to 1/8 lb active ingredient dicamba (such as 2 - 4 fluid oz "Banvel", 4 - 8 fluid oz "Banvel" SGF, 2 - 4 fluid oz "Clarity") + 1/4 - 3/8 lb active ingredient 2,4-D Ester or Amine per acre. Use higher rates when weed infestation is heavy. Surfactant may be added to the mixture at 1/2 to 1 qt per 100 gal of spray solution (0.125 to 0.25% v/v); however, adding surfactant may increase the potential for crop injury. Consult the specific 2,4-D label, dicamba label, or local recommendations for more information and restrictions.

Apply this 3-way combination to winter wheat and winter oat after the crop is tillering and prior to jointing (first node). In Spring Wheat (including Durum) and Spring Oat, apply after the crop is tillering and before it exceeds the 5-leaf stage.

In Spring Barley, apply after the crop is tillering and before it exceeds the 4-leaf stage.

**With bromoxynil (such as "Buctril", "Bronate", "Bronate Advanced", or "Rhino")**

HARMONY® EXTRA XP may be tank mixed with bromoxynil containing herbicides registered for use on wheat, barley, triticale, or fallow. For best results, add bromoxynil containing herbicides to the tank at 3/16 to 3/8 lb active ingredient per acre (such as "Bronate" or "Buctril" at 3/4 - 1 1/2 pt per acre).

Read and follow all label instructions on timing, precautions, and warnings for these herbicides before using these tank mixtures. Follow the most restrictive labeling. Tank mixes of HARMONY® EXTRA XP plus "Buctril" may result in reduced control of Canada thistle.

**With DuPont™ EXPRESS® or EXPRESS® XP Herbicide**

HARMONY® EXTRA XP may be tank mixed with EXPRESS® or EXPRESS® XP based on local recommendations. Read and follow all label instructions on timing, precautions, and warnings for these herbicides before using this tank mixture.

**With DuPont™ ALLY® or ALLY® XP Herbicide**

HARMONY® EXTRA XP may be tank mixed with ALLY® or ALLY® XP based on local recommendations. Read and follow all label instructions on timing, precautions, and warnings for these herbicides before using this tank mixture.

**With "Starane", "Starane + Salvo", "Starane + Sword"**

For improved control of Kochia (2-4" tall) HARMONY® EXTRA XP may be tank mixed with 1/3 to 2/3 pint per acre of Starane, 2/3 to 1 1/3 pints per acre of "Starane" + "Salvo", or 3/4 to 1 1/2 pints per acre of "Starane" + "Sword".

2,4-D and MCP herbicides (preferably ester formulations) may be tank mixed with HARMONY® GT XP plus "Starane". Consult local recommendations and the "TANK MIXTURES" section of this label for additional information.

**With "Aim"**

HARMONY® EXTRA XP can be tank mixed with "Aim" herbicide for improved control of weeds in wheat, barley and triticale.

**With "Stinger" or "Curtail" or "Curtail M" or "Widematch"**

HARMONY® EXTRA XP can be tank mixed with "Stinger", "Curtail", "Curtail M" or "Widematch" herbicides for improved control of weeds in wheat, barley and triticale.

**With Other Broadleaf Herbicides**

Tank mixes of HARMONY® EXTRA XP plus metribuzin may result in reduced control of wild garlic.

**With "Hoelon" Herbicide**

HARMONY® EXTRA XP may be used in combination with "Hoelon" 3EC and "Buctril" herbicides in accordance with the "Hoelon" 3EC label. For best results, use the three-way tank mix of HARMONY® EXTRA XP at 0.4 oz per acre plus "Hoelon" 3EC at 2 2/3 pt per acre plus "Buctril" at 1 1/2 pt per acre. Apply only to winter wheat. This tank mix should only be used under good soil conditions when wild oat is in the 1-4 leaf stage. If conditions are not ideal for the performance of "Hoelon" 3EC, wild oat control may be



reduced. Be sure to follow all warnings and cautions on the "Hoelon" 3EC and "Buctril" labels.

#### **With "Assert" Herbicide or "Avenge" Herbicide**

DuPont™ HARMONY® EXTRA XP can be tank mixed with "Avenge" or "Assert". When tank mixing HARMONY® EXTRA XP with "Assert", always include another broadleaf weed herbicide with a different mode of action (for example: 2,4-D ester, MCPA ester, "Buctril," or "Bronate"). Tank-mixed applications of HARMONY® EXTRA XP plus "Assert" may cause temporary crop discoloration, stunting, or injury when heavy rainfall occurs shortly after application.

#### **With "Discover" NG**

HARMONY® EXTRA XP can be tank mixed with "Discover" NG herbicide for improved control of weeds in spring wheat.

#### **With "Everest"**

HARMONY® EXTRA XP can be tank mixed with "Everest" herbicide for improved control of weeds in spring wheat.

#### **With "Maverick"**

HARMONY® EXTRA XP can be tank mixed with "Maverick" herbicide for improved control of weeds in wheat.

#### **With "Puma"**

HARMONY® EXTRA XP herbicide can be tankmixed with "Puma" IEC for control of some annual grass weeds. This tankmix may also include MCP ester, bromoxynil or bromoxynil/MCP, "Starane", or "Starane" + "Sword" for a greater spectrum of broadleaf control - see the "Puma" IEC label for specific use directions and restrictions on tank mixes.

#### **With other grass control products**

Tank mixtures of HARMONY® EXTRA XP and grass control products may result in poor grass control. DuPont recommends that you first consult your state experiment station, university, or extension agent, Agricultural dealer, or DuPont representative as to the potential for antagonism before using the mixture. If no information is available, limit the initial use of HARMONY® EXTRA XP and the grass product to a small area.

#### **With Insecticides**

HARMONY® EXTRA XP may be tank mixed or used sequentially with insecticides (or fungicides) registered for use on cereal grains. However, under certain conditions (drought stress, or if the crop is in the 2-4 leaf stage), tank mixes or sequential applications of HARMONY® EXTRA XP with organophosphate insecticides (such as parathion) may produce temporary crop yellowing or, in severe cases, crop injury. Test these mixtures in a small area before treating large areas.

**Do not use HARMONY® EXTRA XP plus Malathion, as crop injury will result.**

#### **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 HARMONY® EXTRA XP in fertilizer solution. HARMONY® EXTRA XP must first be slurried with water

and then added to liquid nitrogen solutions (e.g., 28-0-0, 32-0-0). Ensure that the agitator is running while the HARMONY® EXTRA XP is added. Use of this mixture may result in temporary crop yellowing and stunting.

If using low rates of liquid nitrogen fertilizer in the spray solution (less than 50% of the spray solution volume), the addition of surfactant is necessary. Add surfactant at 1/4 qt -1 qt per 100 gal of spray solution ( 0.06 -0.25% v/v) based on local recommendations.

When using high rates of liquid nitrogen fertilizer solution in the spray solution, adding surfactant increases the risk of crop 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 HARMONY® EXTRA XP and fertilizer mixture, ester formulations tend to be more compatible (See manufacturer's label). Additional surfactant is not needed when using HARMONY® EXTRA XP in tank mix with 2,4-D ester or MCPA ester and liquid nitrogen fertilizer solutions.

Note: In certain areas east of the Mississippi river unacceptable crop response may occur with use of straight or dilute nitrogen fertilizer carrier solutions where cold temperatures or widely fluctuating day/night temperatures exist. In these areas consult your agricultural dealer, consultant, field advisor, or DuPont representative for a specific recommendation before using nitrogen fertilizer carrier solutions.

**Liquid nitrogen fertilizer solutions that contain sulfur can increase crop response.**

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

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

#### **SPRINKLER CHEMIGATION WITH HARMONY® EXTRA AND BRONATE FOR POSTEMERGENCE WEED CONTROL IN WINTER & SPRING WHEAT & SPRING BARLEY IN IDAHO**

##### **HOW TO USE**

Use 0.4 to 0.5 oz. HARMONY® EXTRA XP per acre in combination with 3/4 to 1 1/2 pint "Bronate" per acre. Apply to wheat, barley and triticale after the 3-leaf stage but before the flag leaf is visible. Make only one chemigation application of this tank mixture per crop year.

For best results, apply to broadleaf weeds up to the 4-leaf stage, or 2 inches in height or 1 inch in diameter, whichever comes first. Consult HARMONY® EXTRA XP and "Bronate" package labels for list of weeds controlled/suppressed.

##### **SPRINKLER IRRIGATION APPLICATION**

Apply this tank mix through sprinkler irrigation systems including center pivot, lateral move, side (wheel) roll, solid set or hand move irrigation systems only. Do not apply these herbicides through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. **Do not connect an irrigation system (including greenhouse systems) used for**

**DuPont™ HARMONY® EXTRA XP application to any public water system.** A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The sprinkler chemigation system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **SPECIFIC REQUIREMENTS FOR APPLICATION THROUGH SPRINKLER IRRIGATION SYSTEMS**

1. In center pivot and continuous lateral move systems, HARMONY® EXTRA XP + "Bronate" should be applied continuously for the duration of the water application. In solid set systems, application of the tank mix should be made during the last 30 to 45 minutes of the irrigation set.
2. Set the sprinkler system to deliver approximately 0.5 inch or less of water per acre for best product performance.
3. Fill the supply tank with half of the water amount desired, add the HARMONY® EXTRA XP and agitate it well. Add the "Bronate" and then add the remaining water amount with agitation. "Bronate" requires a dilution with at least 4 parts water to 1 part "Bronate".
4. Agitation is recommended in the pesticide supply tank when applying this tank mix.
5. The use of a surfactant is not recommended with this tank mix application.
6. Inject the HARMONY® EXTRA XP + "Bronate" solution at least 8 feet ahead of a right angle turn of irrigation pipe to insure adequate mixing. Allow sufficient time for the herbicide mixture to be flushed through the lines before turning off irrigation water.
7. Follow both HARMONY® EXTRA XP and "Bronate" label instructions for spray tank cleanout both before and after application. Flush lines with clean water following application.

8. Do not apply when wind speed favors drift beyond the area intended for treatment. Avoiding spray drift is the responsibility of the applicator.

#### **MIXING INSTRUCTIONS**

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of HARMONY® EXTRA XP
3. Continue agitation until the HARMONY® EXTRA XP is fully dispersed, at least 5 minutes.
4. Once the HARMONY® EXTRA XP is fully dispersed, maintain agitation and continue filling tank with water. HARMONY® EXTRA XP should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired) then add the required volume of nonionic surfactant. Always add surfactant last. Do not use with spray additives that alter the pH of the spray solution below pH 5.0 or above pH 9.0, as rapid product degradation can occur. Spray solutions of pH 6.0-8.0 allow for optimum stability of HARMONY® EXTRA XP.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply HARMONY® EXTRA XP spray mixture within 24 hours of mixing to avoid product degradation.
8. If HARMONY® EXTRA XP and a tank mix partner are to be applied in multiple loads, pre-slurry the HARMONY® EXTRA XP in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the HARMONY® EXTRA XP.

#### **PRODUCT MEASUREMENT**

HARMONY® EXTRA XP is measured using the HARMONY® EXTRA XP volumetric measuring cylinder. The degree of accuracy of this cylinder varies by  $\pm 7.5\%$ . For more precise measurement, use scales calibrated in ounces.

#### **CROP ROTATION - ALL USES**

Wheat (including durum), Barley, Triticale and Oat may be replanted anytime after the application of HARMONY® EXTRA XP.

Cotton can be planted 14 days after the application of HARMONY® EXTRA XP. Sugarbeets, Winter Rape, and Canola can be planted 60 days after the application of HARMONY® EXTRA XP. Any other crop may be planted 45 days after the application of HARMONY® EXTRA XP.

#### **SURFACTANTS - ALL USES**

Unless otherwise specified, add a DuPont recommended nonionic surfactant having at least 80% active ingredient at 1 to 2 qt per 100 gal of spray solution (0.25 to 0.5% v/v - refer to TANK MIXTURES for specific adjuvant recommendations when HARMONY® EXTRA XP is used in a tank mix).

For pre-plant burndown in Cotton, include a nonionic surfactant, petroleum based crop oil concentrate, or a vegetable-seed oil-based product (methylated seed oils are considered a vegetable seed-based oil). If another herbicide is tank mixed with HARMONY® EXTRA XP to increase the broadleaf weed spectrum, select adjuvants based on the adjuvant limitations of the companion herbicide.

Consult your agricultural dealer, applicator, or DuPont representative for a listing of recommended surfactants. Antifoaming agents may be used if needed.

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

### **GROUND APPLICATION - ALL USES**

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

For flat-fan nozzles, use a spray volume of at least 5 gal per acre (GPA).

For flood nozzles on 30" spacings, use at least 10 GPA, flood nozzles no larger than TK10 (or the equivalent), and a pressure of at least 30 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.

"Raindrop RA" nozzles are not recommended for DuPont™ HARMONY® EXTRA XP applications, as weed control performance may be reduced.

Use screens that are 50-mesh or larger.

### **AERIAL APPLICATION - ALL USES**

Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage at 2 to 5 GPA. Use at least 3 GPA in Idaho, Oregon, or Utah.

Do not apply HARMONY® EXTRA XP by air in the state of New York.

See the **Spray Drift Management** section of this label.

### **GRAZING**

Allow at least 7 days between application and grazing of treated forage. In addition, allow at least 7 days between application and feeding of forage from treated areas to livestock. Allow at least 30 days between application and feeding of hay from treated areas to livestock. Harvested straw may be used for bedding and/or feed. Allow at least 45 days between application and harvesting of grain.

### **SPRAY EQUIPMENT**

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

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

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

Continuous agitation is required to keep HARMONY® EXTRA XP in suspension.

### **SPRAYER CLEANUP**

The spray equipment must be cleaned before HARMONY® EXTRA XP is sprayed. Follow the cleanup procedures specified on the labels of the previously applied products. If no directions are provided, follow the six steps outlined in After Spraying HARMONY® EXTRA XP.

#### **AT THE END OF THE DAY**

It is recommended that during periods when multiple loads of HARMONY® EXTRA XP herbicide are applied, 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 which can accumulate in the application equipment.

#### **AFTER SPRAYING HARMONY® EXTRA XP AND BEFORE SPRAYING CROPS OTHER THAN WHEAT, BARLEY, TRITICALE AND OAT**

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

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
2. Fill the tank with clean water and 1 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) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

\* Equivalent amounts of an alternate-strength ammonia solution or a DuPont-approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your Ag dealer, applicator, or DuPont representative for a listing of approved cleaners.

#### **Notes:**

1. **CAUTION:** Do not use chlorine bleach with ammonia as dangerous gases will form. Do not clean equipment in an enclosed area.
2. Steam-cleaning aerial spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.

- 12/17
- When DuPont™ HARMONY® EXTRA XP is tank mixed with other pesticides, all cleanout procedures should be examined and the most rigorous procedure should be followed.
  - In addition to this cleanout procedure, all pre-cleanout guidelines on subsequently applied products should be followed as per the individual labels.
  - Where routine spraying practices include shared equipment frequently being switched between applications of HARMONY® EXTRA XP and applications of other pesticides to HARMONY® EXTRA XP-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to HARMONY® EXTRA XP 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 applicator is responsible for considering all these factors when making application decisions.

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

## IMPORTANCE OF DROPLET SIZE

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

### Controlling Droplet Size - General Techniques

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

### Controlling Droplet Size - Aircraft

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

## BOOM HEIGHT

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

## WIND

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

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

## TEMPERATURE AND HUMIDITY

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

## TEMPERATURE INVERSIONS

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

## SHIELDED SPRAYERS

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

## AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

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

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

## RESISTANCE

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

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

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

## INTEGRATED PEST MANAGEMENT

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

## PRECAUTIONS

Injury to or loss of adjacent sensitive crops, desirable trees or vegetation may result from failure to observe the following:

- Do not apply, drain or flush equipment on or near desirable trees or other plants or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants.
- Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with non-target plants or areas.
- Carefully observe all sprayer cleanup instructions both prior to and after using this product, as spray tank residue may damage crops other than wheat, barley, triticale or oat.

DuPont™ HARMONY® EXTRA XP is only registered on wheat, barley, oat, triticale and fallow. Do not use on any other crop.

The total rate of HARMONY® EXTRA XP for wheat (including durum), barley and triticale cannot exceed 1.0 ounce product per acre applied to any one crop during one growing season.

The total rate of HARMONY® EXTRA XP for oat (spring and winter) cannot exceed 0.4 ounces product per acre applied to any one crop during one growing season.

Varieties of wheat (including durum), barley and triticale 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 to a small area.

Under certain conditions such as heavy rainfall, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after HARMONY® EXTRA XP application, temporary discoloration and/or crop injury may occur. To reduce the potential of crop injury, tank mix HARMONY® EXTRA XP with 2,4-D (ester formulations perform best—see Tank Mixtures) and apply after the crop is in the tillering stage of growth.

HARMONY® EXTRA XP should not be applied to wheat, barley, triticale or oat that is stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage, as crop injury may result. Risk of injury is greatest when crop is in the 2 to 5- leaf stage. Severe winter stress, drought, disease, or insect damage following application also may result in crop injury.

Do not apply to wheat, barley, triticale or oat crops underseeded with another crop.

Dry, dusty field conditions may result in reduced control in wheel track areas.

Do not harvest sooner than 45 days after the last application of HARMONY® EXTRA XP.

## STORAGE AND DISPOSAL

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

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

**Container Disposal: For Plastic Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. **For Fiber Sacks:** Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

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

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

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"Raindrop RA" is a registered trademark of Delavan

"Avenge" is a registered trademark of Amvac Chemical Corporation

"Rhino" is a registered trademark of The McGregor Company

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**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.

DuPont does not agree to be an insurer of these risks. **TO THE FULLEST EXTENT PERMITTED BY LAW, 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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This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

**For product information call: 1-888-6-DUPONT**

**Internet address: [www.dupont.com/ag/us](http://www.dupont.com/ag/us)**

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# SUPPLEMENTAL LABELING

**DuPont Crop  
Protection**

**DUPONT™ HARMONY® EXTRA XP  
HERBICIDE  
PRE-PLANT OR AT-PLANTING  
BURNDOWN**

## DUPONT™ HARMONY® EXTRA XP HERBICIDE

EPA REG. NO. 352-611

### PRE-PLANT OR AT-PLANTING BURNDOWN IN COTTON, FIELD CORN, GRAIN SORGHUM, RICE AND SOYBEANS

Applications of DuPont™ HARMONY® EXTRA XP Herbicide (HARMONY® EXTRA) may be applied for burndown of emerged weeds before planting, or at planting, of cotton, field corn, grain sorghum, rice and soybeans.

#### DIRECTIONS FOR USE

HARMONY® EXTRA may be used as part of a pre-plant or at-planting burndown treatment, in combination with other suitable registered herbicides.

Read and follow all manufacturers label recommendations for the companion herbicide. If those recommendations conflict with this label, do not tank mix the herbicide with HARMONY® EXTRA.

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

In fields to be planted to cotton, apply HARMONY® EXTRA at 0.3 to 0.5 ounce per acre. In fields to be planted to field corn, grain sorghum, rice, or soybeans, apply HARMONY® EXTRA at 0.3 to 0.6 ounce per acre for control or partial control of the weeds listed on the EPA registered label. Allow at least 14 days between application and planting of cotton, corn, soybeans or grain sorghum. Include a nonionic surfactant, petroleum based crop oil concentrate, or vegetable-seed oil-based product (methylated seed oils are considered a vegetable seed-based oil).

- If another herbicide is tank mixed with HARMONY® EXTRA to increase the broadleaf weed spectrum, select adjuvants based on the adjuvant limitations of the other companion herbicide.

#### 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.

#### IMPORTANT PRECAUTIONS

Seedling disease, nematodes, cold weather, deep planting (more than 2"), excessive moisture, high salt concentration, and/or drought may weaken cotton seedlings and increase the possibility of crop injury. Cotton resumes normal growth once favorable growing conditions return.

#### RESTRICTIONS

- This product is limited to ground application only in the State of New York. DO NOT apply by air in that state.
- DO NOT apply after planting field corn, grain sorghum, rice or soybeans.
- DO NOT apply later than 14 days before planting cotton, corn, soybeans or grain sorghum.
- DO NOT allow livestock to graze on, or feed forage, hay or straw from treated soybean fields.
- DO NOT make more than one pre-plant or at-planting application of HARMONY® EXTRA to field corn, rice, sorghum, or soybeans per growing season.
- DO NOT apply more than 0.6 oz. of HARMONY® EXTRA to rice, field corn, sorghum, or soybeans pre-plant or at-planting.

For product information call 1-888-6-DUPONT

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**IMPORTANT  
BEFORE USING HARMONY® EXTRA, READ  
AND FOLLOW ALL APPLICABLE DIREC-  
TIONS, RESTRICTIONS AND PRECAUTIONS  
ON THE EPA-REGISTERED LABEL.**

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

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

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

(Replaces H-65385)

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