

352-648

05-03-2007

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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

MAY - 3 2007

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

Dear Mr. Ambrose:

Subject: DuPont Synchrony XP Herbicide (Revise TM Instructions for STS Soybeans)  
EPA Registration No. 352-648  
Application Dated February 28, 2007

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 change before you release the product for shipment.

--Update the "Limitation of Warranty and Liability" as per recent agreement.--

Submit one copy of your final printed labeling incorporating the above change before you release the product for shipment. Amended labeling supersedes all previously accepted 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)



**DuPont™**  
**Synchrony® XP**  
herbicide

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**DRAFT LABEL**



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

# DUPONT™ SYNCHRONY® XP

## Highlights

- SYNCHRONY® XP provides selective PRE, PPI, Burndown, and POST weed control in soybeans. Use rates depend on weed size, weed spectrum, and desired residual control.
- SYNCHRONY® XP can be used on conventional, "Roundup Ready", STS™/"Roundup Ready" stack, or STS™ only soybeans.
- SYNCHRONY® XP used PRE, PPI, Burndown, or POST can help delay weed shift patterns that are developing from glyphosate-only applications.
- For Burndown, SYNCHRONY® XP may be tank mixed with glyphosate to deliver faster, more consistent control of larger weeds, even under adverse conditions.
- SYNCHRONY® XP can be used as an in-crop glyphosate tankmix partner for "Roundup Ready" soybeans that broadens the weed control spectrum on key weeds (like dandelion, hemp sesbania, lambsquarters, morningglory, pigweeds, yellow nutsedge, ragweeds, velvetleaf, and others) versus glyphosate-only applications.
- New STS™/RR soybean varieties allow greater weed control options by utilizing higher rates of SYNCHRONY® XP with your glyphosate application. This tankmix will deliver faster, more consistent control of broadleaf weeds and help delay weed shifts developing with glyphosate-only applications - with complete crop safety. Ask your local seed dealer for availability of this new technology.
- Include a crop oil concentrate or a nonionic surfactant and ammonium-based nitrogen fertilizer where required.
- SYNCHRONY® XP may be applied by ground (broadcast or band) or by aerial application.
- Certain environmental conditions, such as cool and dry, or hot and humid weather, affect the performance of SYNCHRONY® XP. See Environmental Conditions.
- Consult label text for complete instructions. Always read and follow label directions for use.

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# DuPont™ Synchrony® XP

herbicide

### Dispersible Granules

Active Ingredients	By Weight
Chlorimuron ethyl	
Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate	21.5%
Thifensulfuron methyl	
Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate	6.9%
<b>Inert Ingredients</b>	<b>71.6%</b>
<b>TOTAL</b>	<b>100.0%</b>

EPA Reg. No. 352 - 648  
 EPA Est. No. \_\_\_\_\_  
 Net Contents: \_\_\_\_\_

ACCEPTED  
 with COMMENTS  
 in EPA Letter Dated:  
 MAY - 3 2007

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for this product registered under EPA Reg. No. 352-648

## KEEP OUT OF REACH OF CHILDREN

## CAUTION

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

### FIRST AID

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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

### CAUTION

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION!** Causes moderate eye irritation. Harmful if absorbed through skin.

Avoid contact with skin, eyes 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 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, 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.

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

### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

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

## 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 made of any waterproof material such as polyethylene or polyvinylchloride.

Shoes plus socks.

Use only in the geographies identified in the "Geographical Use Regions" section of this label.

DuPont™ SYNCHRONY® XP herbicide must be used only in accordance with recommendations on this label or in separately published DuPont recommendations.

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

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

### APPLICATION INFORMATION - ALL USES

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

### Geographic Use Regions

The geographical use regions for Synchrony XP are defined below:

**Northern Region:** The states of Iowa (fields inside the boundaries of the Clarion-Nicollet-Webster and Hamburg-Ida-Monona soil associations and fields located inside the historic floodplain of the Missouri River), Minnesota, Nebraska (fields north of route 30 and west of Route 281), New York (fields north of Interstate 90), South Dakota, Wisconsin (fields north of Interstate 90 between Lacrosse and Madison and fields north of Interstate 94 between Madison and Milwaukee) and Hawaii.

**Central Region:** The states of Delaware, Illinois, Indiana, Iowa (fields located outside the boundaries of the Clarion-Nicollet-Webster and Hamburg-Ida-Monona soil associations and fields located outside the historic flood plain of the Missouri River), Kansas, Maryland, Michigan, Missouri (except the Bootheel), Nebraska (fields south of Route 30 and east of Route 281), New Jersey, New York (fields south of Interstate 90), Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin (fields south of Interstate 90 between Lacrosse and Madison and fields south of Interstate 94 between Madison and Milwaukee).

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

### Application Methods

- preemergence, including pre-plant incorporated.
- pre-plant and early pre-plant, including burndown.
- postemergence in-crop
- sequential preemergence followed by postemergence

### Timing To Crop Stage

- SYNCHRONY® XP for PRE, PFI and Burndown uses may be applied any time prior to soybean emergence.
- SYNCHRONY® XP, for in-season use on STS™ soybeans, may be applied any time after emergence but no later than 60 days before soybean maturity.
- SYNCHRONY® XP, for in-season use on non-STS™ soybeans, may be applied any time after the first trifoliolate but no later than 60 days before soybean maturity.

### Timing To Weeds

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

### Spray Additives

Applications of SYNCHRONY® XP must include either a crop oil concentrate or a nonionic surfactant. Crop oil concentrate is the required adjuvant system unless tank mixing with a product that precludes use of crop oil concentrate. An ammonium nitrogen fertilizer may also be required. Products that combine ammonium fertilizers with surfactants or crop oils must meet all of the surfactant/crop oil and ammonium nitrogen fertilizer requirements.

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

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

- Apply at 1% v/v (1 gal per 100 gal spray solution) or 2% under arid conditions.
- Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

**Nonionic Surfactant (NIS)**

- Apply at 0.25% v/v (1 qt per 100 gal spray solution) or 0.5% under arid conditions.
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

**Ammonium Nitrogen Fertilizer**

- Use 2 qt/acre of a high-quality urea ammonium nitrate (UAN), such as 28%N or 32%N, or 2 lb/acre of a spray grade ammonium sulfate (AMS). Use 4 qt/acre UAN or 4 lb/acre AMS under arid conditions.
- Do not use liquid nitrogen fertilizer as the total carrier solution.

**Special Adjuvant Types**

- Combination adjuvant products may be used at doses that provide the required amount of NIS, COC, MSO and/or ammonium nitrogen fertilizer. 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 Product Management.

**Tank Mixes**

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

Other than the exceptions noted, and in addition to the tank mix partners and rates indicated in this label, SYNCHRONY® XP may be tank mixed or followed with sequential applications of other products registered for use in soybeans. SYNCHRONY® XP may be applied in tank mix combinations with full or reduced rates of other products provided:

- The tank mix product is labeled for the same timing, method of application, adjuvants, and use restrictions as SYNCHRONY® XP.
- The tank mix is not specifically prohibited on the label of the tank mix product.
- The tank mix combination is compatible as determined by a "jar test" described in the TANK MIX COMPATIBILITY TESTING section below.

Weed control and crop safety resulting from the use of tank mixtures not specifically noted on this label, or in separately published DuPont recommendations, are the responsibility of the user.

**Tank Mix Compatibility Testing**

Perform a jar test prior to tank mixing to ensure compatibility of SYNCHRONY® XP and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, gels, oily film or layers, or other precipitates, it is not compatible.

**Mixing Instructions**

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of SYNCHRONY® XP.
3. Continue adequate agitation.
4. SYNCHRONY® XP should be thoroughly mixed with water in the spray tank before adding any other material. As the tank is filling, add (in order): other herbicide(s), the required spray adjuvant, and the nitrogen fertilizer where required.
5. Apply SYNCHRONY® XP spray preparation within 24 hours of mixing to avoid product degradation.
6. If the mixture has settled, thoroughly reagituate before using.

**Cultivation**

Do not cultivate within 7 days of application. Cultivation may put weeds under stress by pruning roots, thus diminishing control.

Cultivation approximately 14 days after application will help control suppressed weeds.

**FALL APPLICATION IN THE NORTHERN REGION**

Tank mixes of SYNCHRONY® XP at 0.375 oz/acre plus EXPRESS® XP 75 WDG herbicides are recommended for fall burndown of 3-inch dandelion in conservation tillage or no-till soybean production systems.

Apply 0.375 oz/acre SYNCHRONY® XP -plus- 0.125-0.25 oz/acre EXPRESS® XP -plus- crop oil concentrate -plus- 8 oz ai/acre 2, 4-D LVE.

SYNCHRONY® XP + EXPRESS® XP may be applied to no-till or conservation tillage fields anytime after the fall harvest, up to 45 days prior to soybean planting.

**PREEMERGENCE OR PREPLANT SPRING APPLICATION: CENTRAL AND SOUTHERN REGIONS ONLY**

SYNCHRONY® XP at 1 to 3 oz/acre may be used for preemergence weed control in all states located in SYNCHRONY® XP Central and Southern Rotational Regions (excluding Florida). Use higher rates for longer lasting residual control.

**Application Timing** - DuPont™ SYNCHRONY® XP may be applied from 45 days before planting soybeans to just before soybean emergence.

**Application Rates:**

Medium and Fine Soils,  
1.5 - 4% Organic Matter

	Rate
<b>Central Region States:</b>	
No pH restriction*	1 oz/acre
Composite soil pH of 7 or less	1.25 - 3 oz/acre
<b>Southern Region States:</b>	
No pH restriction	1 - 1.5 oz/acre
Composite soil pH of 7 or less	1.5 - 3 oz/acre

\* In Michigan, New York and Wisconsin, do not apply the 1 oz/acre rate to soils exceeding pH 7.6. In all other states, the soil pH is unrestricted for the 1 oz/acre rate.

**Preemergence Residual Control**

When used as directed, applications of 1.25 - 3 oz/acre SYNCHRONY® XP will provide preemergence control or partial control (suppression) of the following weeds:

**Control**

Cocklebur  
Jimsonweed  
Lambsquarters  
Marestail  
Morningglory, annual, ivyleaf,  
entireleaf, pitted, smallflower, tall  
Mustard, wild  
Pigweed redroot, smooth  
Purslane speedwell  
Ragweed, common  
Smartweeds, annual  
Velvetleaf

**Suppression**

Annual grasses  
(foxtails, barnyardgrass  
crabgrass, panicum)  
Chickweed, common  
Nutsedge, yellow, purple  
Prickly Sida (teaweed)  
Ragweed, giant

Early spring applications of 1 oz/acre SYNCHRONY® XP will provide limited residual control of the above-listed weeds to contribute to a clean seed bed at planting.

If applying 1 oz/acre SYNCHRONY® XP under heavy weed pressure, delayed planting, or adverse environmental conditions, additional control measures at planting may be required.

For improved residual control, SYNCHRONY® XP may be tank mixed with such products as LINEX® 4L, metribuzin-containing products, "Valor", metolachlor or pendimethalin.

**Burndown Control of existing winter and summer annual weeds**

SYNCHRONY® XP spring preplant applications will provide burndown control of certain broadleaf weeds which are no greater than 3 inches in height.

To obtain burndown of the weed species listed below:

- Addition of crop oil concentrate is required.
- Use a minimum of 20 gallons per acre with spray nozzles that provide thorough spray coverage of the weeds.
- 2,4-D LVE may be added for enhanced burndown control.

Bittercress, small- flowered	Pigweed
Bushy wallflower	Ragweed, common, giant
Buttercup, smallflower	Shepherd's-purse
Butterweed	Smartweed, annual
Dandelion	Speedwell field, purslane
Deadnettle, purple	Sunflower
Garlic, wild*	Tansymustard
Henbit	Thistle - Canadian (above ground portion)
Lambsquarters	Velvetleaf
Lettuce, prickly	Whitlowgrass
Marestail*	Yellow rocket
Mustard, wild	
Pennycress	
Pepperweed	

\*Addition of 8 oz ai/acre 2,4-D LVE is required.

To burndown annual grasses and broadleaf weeds listed above when they exceed the recommended height, SYNCHRONY® XP may be tank mixed with other herbicides registered for preemergence or burndown application prior to soybean emergence.

When tank mixing with glyphosate-containing products, replace the crop oil concentrate with nonionic surfactant and follow the manufacturer's instructions for ammonium sulfate addition.

**Planned Sequential Programs**

SYNCHRONY® XP may be followed as needed by sequential applications of one or more postemergence herbicides such as glyphosate (in glyphosate tolerant soybeans), DuPont™ CLASSIC®, SYNCHRONY® XP, DuPont™ HARMONY® GT or "Flexstar". To insure maximal rotation flexibility when considering a sequential program of SYNCHRONY® XP followed by CLASSIC® or SYNCHRONY® XP, carefully consider: the soil pH, the recommendations below, the rotational information in this section, and the Rotational Crop Guidelines.

**For applications of 1 oz/acre SYNCHRONY® XP [Central and Southern Region states] to soils with pH greater than 7.0,** do not apply additional chlorimuron-ethyl-containing herbicides (CLASSIC®, SYNCHRONY® XP) except in the states of AL, AR, GA, LA, MO, MS, NC, OK, SC, TN, and TX, where up to 0.5 oz/acre CLASSIC® or 0.75 oz/acre SYNCHRONY® XP may be applied.

**For applications of 1.5 oz/acre SYNCHRONY® XP [Southern Region states] to soils with pH greater than 7.0,** do not apply additional chlorimuron-ethyl-containing herbicides (CLASSIC®, SYNCHRONY® XP).

**Applications of 1-3 oz SYNCHRONY® XP (Central and Southern Region States) to soils with pH less than 7.0** may be followed with a single postemergence application of CLASSIC® or SYNCHRONY® XP. See table below for rates that may be applied:

SYNCHRONY® XP oz/acre	CLASSIC® oz/acre	SYNCHRONY® XP oz/acre
up to 2	up to 3/4	up to 3/4
2.1 - 2.5	up to 2/3	up to 3/4
2.6 - 3	up to .74	none

Refer to the sequential herbicide labels for specific information regarding use rates, application timing, crop rotations and other restrictions and precautions.

**Rotational Crop Information**

For rotational crop information following 1 oz/acre DuPont™ SYNCHRONY® XP in Central Region states, and up to 1.5 oz/acre applications in Southern Region states, use Recrop Interval 1 or 2 in the 'Rotational Crop Guidelines' section of this label.

For applications of SYNCHRONY® XP greater than 1 oz/acre in the Central region and greater than 1.5 oz/acre in the Southern region, use Recrop Interval 4 in the 'Rotational Crop Guidelines' section of this label. Sequential applications of SYNCHRONY® XP or CLASSIC® following 1-3 oz of SYNCHRONY® XP on soils with pH less than 7.0 also use Recrop Interval 4.

**SYNCHRONY® XP PLUS  
GLYPHOSATE SPRING  
BURNDOWN: ALL REGIONS**

SYNCHRONY® XP at 0.375-0.75 oz/acre may be tank mixed with glyphosate-containing herbicides registered for soybeans for burndown of existing summer and winter annual weeds and limited residual control of certain summer annual broadleaf weeds. Refer to 'Rotational Crop Guidelines' to provide guidance on allowable use rates by region.

**Application Timing**

SYNCHRONY® XP plus glyphosate tank mixtures may be applied up to 30 days before planting or prior to soybean emergence after planting.

**Spray Additives**

- Always include 0.25% non-ionic surfactant.
- The addition of 1 - 2 percent dry Ammonium Sulfate by weight or 8.5 - 17 pounds per 100 gallons of water may increase performance of this tank mix.
- For enhanced burndown control, 8 oz ai/acre of 2,4-D LVE may be added up to seven days prior to planting.

**Weeds Controlled**

SYNCHRONY® XP tank mixed with glyphosate applied prior to planting will provide burndown control of the weeds listed on page four of this label as well as control of most winter and summer annual broadleaf and grass weeds. Consult the glyphosate specimen labels for specific use instructions including all weeds controlled or suppressed, the suggested use rates, maximum weed size at application, restrictions, limitations and precautions. The addition of SYNCHRONY® XP to glyphosate-containing herbicides will increase the burndown control of the following weeds versus application of glyphosate alone:

Dandelion	Morningglory Spp., annual
Dock, curly	Nutsedge, yellow
Hemp sesbania	Primrose, cutleaf evening
Henbit	Ragweed, common and giant
Ladysthumb	Sicklepod
Lambsquarters	Smartweed, pennsylvania
Marestail	Velvetleaf

**Weeds Controlled - Limited Preemergence**

When used according to this label, SYNCHRONY® XP at 0.75 oz/A can provide limited preemergence control of the weeds listed below to contribute to a clean seedbed at planting. For season-long control, a planned PRE or POST sequential program is required.

Jimsonweed	Palmer amaranth
Ladysthumb	Pigweed, redroot, smooth
Lambsquarters	Smartweeds, pennsylvania
Marestail	Ragweeds
Nutsedge, yellow	

**SYNCHRONY® XP  
POSTEMERGENCE - ANY  
SOYBEAN: ALL REGIONS**

**Application Rates**

SYNCHRONY® XP at 0.375 oz/acre may be applied postemergence to any soybean for broadleaf weed control.

**Timing to Weeds**

Apply 0.375 oz/acre SYNCHRONY® XP to 1 - 4" weeds that are actively growing. Applications made to weeds that are in the cotyledon stage, larger than the size indicated, or to weeds under stress may result in unsatisfactory control.

**Spray Additives**

- Add nonionic surfactant and ammonium nitrogen fertilizer as noted in 'Spray Additives' under 'Application Information- All Uses'

**Weeds controlled:**

- Cocklebur
- Pigweed species (including triazine resistant)
- Wild sunflower

And suppress growth of the following weed species:

- Lambsquarters
- Jimsonweed
- Milkweed, common (above ground portions only)
- Ragweed, common
- Smartweeds, annual
- Velvetleaf

**SYNCHRONY® XP and glyphosate tankmixes**

A tank mix of SYNCHRONY® XP at 0.375 oz/acre plus glyphosate (equivalent to 1 qt of a 4 lb/gallon formulation) will control the weeds listed in the table below.

- When tank mixing SYNCHRONY® XP + glyphosate herbicides, it is recommended to add 4.25 -17 lb ammonium sulfate per 100 gallons of spray mixture.
- The addition of surfactant at 0.25% v/v (1 qt per 100 gallons of spray) to some SYNCHRONY® XP + glyphosate tank mixes may improve weed control. Since some glyphosate products differ in their adjuvant contents, some glyphosate products, such as "Glyphomax" or "Roundup Original" allow for the addition of surfactants.
- See the glyphosate manufacturer's label for specific ammonium sulfate and surfactant recommendations.



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Maximum weed height in inches  
0.375 oz/ac DuPont™ SYNCHRONY® XP  
+ glyphosate\*

Weeds Controlled	Maximum weed height in inches
Barnyardgrass	6
Cocklebur	8
Corn, volunteer	20
Crabgrass species	10
Dandelion	4
Foxtail species	10
Hemp sesbania	4
Jimsonweed	10
Ladysthumb	8
Lambsquarters	6
Morningglory, entireleaf, ivyleaf, pitted, tall	4
Nightshade, eastern black	5
Nutsedge, yellow	6
Panicum, fall, texas	10
Pigweed, redroot, rough	12
Pigweeds, other	8
Prickly sida	4
Ragweed, common, giant	8
Sicklepod	4
Signalgrass, broadleaf	4
Smartweed, pennsylvania	8
Sunflower	8
Velvetleaf	4
Waterhemp species	4

\*equivalent of 1 qt/ac of 4 lb/gal glyphosate

**Other SYNCHRONY® XP Tank Mixes**

Add 0.75 - 1.125 pt/acre "Flexstar" for control of emerged 4" waterhemp and 2" eastern black nightshade, or improved control of velvetleaf and common ragweed.

Add up to 0.15 oz/acre "FirstRate" for improved control of emerged common ragweed and velvetleaf.

Add up to 0.042 oz/acre DuPont™ HARMONY® GT 75 WDG for improved control of emerged lambsquarters, common milkweed, annual smartweeds and velvetleaf.

Refer to the "Flexstar", "FirstRate" and HARMONY® GT labels for other weeds controlled and for the appropriate rate based on the weed sizes. Read and follow all use directions, restrictions and precautions of both SYNCHRONY® XP and the tankmix partners. When tankmixing, the most restrictive labeling applies

**Precautions for 0.375 oz SYNCHRONY® XP uses**

- A temporary crop response may occur following an application of SYNCHRONY® XP to soybeans not designated STS™ in the variety name.
- Applications made when the crop and weeds are under stress from moisture, cold, heat, high humidity, disease, insect pressure and prior herbicide stress may result in excessive crop response and/or reduced weed control effectiveness.
- Do not tankmix "Poast Plus" with 0.375 oz/acre SYNCHRONY® XP unless the soybean is designated as an STS™ variety.

**SYNCHRONY® XP**

**POSTEMERGENCE - FOR USE ON SOYBEAN VARIETIES DESIGNATED AS STS™/RR OR STS™: ALL REGIONS**

- Application of greater than 0.375 oz/acre SYNCHRONY® XP to soybean varieties not designated as STS™/RR or STS™ will result in severe crop injury and/or yield loss.
- DuPont will not warrant the safety of this treatment to seed saved from previous year's production (bin run seed).
- These STS™/RR or STS™ varieties must be purchased from an authorized seed supplier.
- The STS™/RR or STS™ designation indicates the soybean variety contains a proprietary trait that enhances the soybean's natural tolerance to DuPont soybean sulfonyleurea herbicides. Information on STS™/RR or STS™ soybean varieties may be obtained from your seed supplier or DuPont representative.

**APPLICATION RATES**

SYNCHRONY® XP may be applied postemergence in STS™ soybeans at 0.375 - 1.125 oz/acre. For rate limitations in certain geographies, see the "Rotational Crop Guidelines" section.

**Weeds Controlled**

Apply SYNCHRONY® XP at a rate of 0.375 to 1.125 oz/acre for selective postemergence control of the broadleaf weeds in the table below:

Weed	Maximum Height (in inches)	
	0.375 oz/ac	0.75-1.125 oz/ac
Beggarticks (bidens sp)		6
Bristly starbur		3
Buffalobur		6*
Burcucumber		3
Cocklebur	6	8
Cowpea		5
Dandelion (above ground portion)	3*	4
Florida beggarweed		5
Hemp sesbania		5
Jerusalem artichoke (above ground portion)		6
Jimsonweed	3	5
Kochia		3*
Ladysthumb	4	8
Lambsquarters	4*	4
Marestail	2	5
Milkweed, common (above ground portion)	4*	6
Morningglory (annual)		
Entireleaf	2*	3
Ivyleaf	2*	3
Pitted	2*	3
Smallflower	2*	3
Tall	2*	3
Mustard	4	5**
Nutsedge, purple		4*
Nutsedge, yellow	3*	3
Palmer amaranth (pigweed)	4	8
Pigweeds		
Redroot (rough)	8	8
Others		8
Pokeweed	3*	6*
Ragweed		
Common	4*	4
Giant	4*	4
Sicklepod		3
Smartweed, Pennsylvania	4	8
Sowthistle, perennial (rosette stage)	6*	6
Spurred anoda		3*
Sunflower	4	8
Thistle, canadian		4*
Thistle, russian		3*
Wild poinsettia		2
Velvetleaf	4*	8
Venice mallow		3*
Wild carrot	4*	6

\* Suppression  
\*\* Diameter

Apply DuPont™ SYNCHRONY® XP at 1.125 oz/acre to preserve the STS™ trait in STS™ soybean seed production. SYNCHRONY® XP used at 1.125 oz/ac will give residual control of newly germinating broadleaf weeds (see Preemergence or Preplant Spring Application, Preemergence Residual Control).

**Sequential Applications:**

A follow up application of DuPont™ CLASSIC® herbicide or SYNCHRONY® XP herbicide may be made 2-3 weeks after a SYNCHRONY® XP application to control weeds with multiple germination flushes or weeds under stress such as burcucumber, cowpea, giant ragweed, morningglory, and sicklepod. See Rotational Crop Guidelines for intervals following sequential applications.

**Spray Additives**

For directions for use on addition of crop oil concentrate, nonionic surfactant and ammonium nitrogen fertilizer, see the 'Spray Additives' section under 'Application Information - All Uses'.

**Tank Mixes**

*SYNCHRONY® XP and glyphosate products on STS™/RR stacked-trait soybeans:*

- SYNCHRONY® XP may be tank mixed with glyphosate-containing herbicides for improved control of broadleaf weeds not completely controlled by either product alone.
- Always include 0.25% v/v non-ionic surfactant. The addition of 1 - 2 percent dry ammonium sulfate by weight or 8.5 - 17 pounds per 100 gallons of water may increase performance of these tank mixtures.

*SYNCHRONY® XP and "Flexstar", "Reflex", "Ultra Blazer", or "Cobra" Herbicides On Any STS™ soybean:*

For control of up to 4" waterhemp, up to 2" eastern black nightshade and for improved common ragweed control, SYNCHRONY® XP may be tankmixed with:

- 0.75 - 1.25 pt/acre "Flexstar"
- 0.75 - 1.5 pt/acre "Reflex"
- 0.5 - 1.5 pt/acre "Ultra Blazer", or
- 4 - 6 fluid oz/acre "Cobra"

Refer to the "Flexstar", "Reflex", "Ultra Blazer" and "Cobra" labels for the appropriate rate based on the weed sizes to be controlled. Nonionic surfactant or crop oil concentrate must be added.

- For best results with SYNCHRONY® XP plus "Reflex" or "Flexstar", use a methylated seed oil-based or petroleum oil-based crop oil concentrate at 8 pt per 100 gallon spray solution (1% v/v).
- For best results with SYNCHRONY® XP plus "Ultra Blazer", use nonionic surfactant at 2 pt per 100 gallon spray solution. Use of crop oil concentrate is not recommended, as severe injury may occur.
- For best results with SYNCHRONY® XP plus "Cobra", use crop oil concentrate at 4 pt per 100 gallon spray solution (0.5% v/v).

For control of Prickly Sida and Hemp Sesbania, tank mix SYNCHRONY® XP with 8-12.5 fl oz "Cobra".

Use the higher "Cobra" rate when Prickly Sida or Hemp Sesbania are heavy or if Prickly Sida and Hemp Sesbania approach the maximum size of 1" or 4", respectively. Include a nonionic surfactant at 1-2 pt per 100 gallons of spray solution (.125-.25% v/v). Do not use crop oil concentrate when tankmixing SYNCHRONY® XP and "Cobra" at these rates.

Tank mix applications of SYNCHRONY® XP plus "Flexstar", "Reflex", "Ultra Blazer", or "Cobra" may not control weeds listed on the SYNCHRONY® XP label as completely as applications of SYNCHRONY® XP alone.

*SYNCHRONY® XP and "FirstRate" herbicide:*

For improved Ragweed and Cocklebur control, add between 0.075 - 0.3 oz/acre "FirstRate" to SYNCHRONY® XP. These tankmixes will control up to 10" Cocklebur or Common Ragweed and up to 12" Giant Ragweed. Use a lower amount of "FirstRate" when weeds are less than the maximum size and under good growing conditions. Use a higher amount of

“FirstRate” when weeds are approaching the maximum size and/or under unfavorable growing conditions.

A good quality petroleum-based or methylated seed oil-based crop oil concentrate must be added to the tank mix at the rate of 8 pints per 100 gallons of spray solution or at 1% v/v. An ammonium nitrogen fertilizer may be added as directed under the “Spray Additives” section.

**DuPont™ SYNCHRONY® XP and Postemergence Grass Herbicides:**

SYNCHRONY® XP and SYNCHRONY® XP tankmixes may be tank mixed with postemergence grass herbicides such as DuPont™ ASSURE® II herbicide. For best results, apply SYNCHRONY® XP seven days before or one day after the grass herbicide. Refer to the grass herbicide label for precautions and specific use information.

**APPLICATION EQUIPMENT**

**Ground Application  
(See Also Spray Drift Management)**

**Broadcast Application**

- Postemergence in soybeans, use a minimum of 10 gal water per acre. Under heavy weed pressure or dense crop foliage, increase minimum spray volume to 15-25 gal per acre. For best performance, select nozzle and pressure combinations that deliver medium to coarse spray droplets, as indicated, for example, by ASAE standard S572.
- Preemergence in soybeans, use a minimum of 10 gal water per acre. For best performance, select nozzle and pressure combinations that deliver coarse to very coarse spray droplets, as indicated, for example, by ASAE standard S572.
- For burndown applications of existing vegetation, use a minimum of 15 gal water per acre. For large weeds and/or heavy residue, increase gallonage to ensure coverage. For best performance, select nozzle and pressure combinations that deliver medium to coarse spray droplets, as indicated, for example, by ASAE standard S572.

**Band Application**

- Because band applicators spray a narrower area than broadcast applicators, use proportionately less spray solution for band applications.
- Carefully calibrate the band applicator to not exceed the labeled rate.
- Flat fan nozzles are recommended.
- Carefully follow the nozzle manufacturer’s instructions for nozzle orientation, distance of the nozzles from the crop and weeds, spray volumes, calibration, and spray pressure for band applications.

**Aerial Application  
(See Also Spray Drift Management)**

- Use nozzle types and arrangements that will provide optimum spray distribution and maximum coverage at 3-5 gal per acre.
- Use a minimum of 3 gal water per acre. Under heavy weed pressure or dense crop foliage, increase the minimum spray volume to 5 gal per acre.
- Do not apply during a temperature inversion, when winds are gusty, or when other conditions could produce poor coverage and/or off-target spray movement.

**ENVIRONMENTAL CONDITIONS  
AND BIOLOGICAL ACTIVITY**

SYNCHRONY® XP rapidly inhibits the growth of susceptible weeds. Leaves of susceptible plants yellow 3-5 days after application, followed, in controlled plants, by the death of the growing point. SYNCHRONY® XP will provide complete control of susceptible weeds in 7-21 days. Suppressed plants may remain green but will be stunted and noncompetitive.

SYNCHRONY® XP will provide best results when applied to young, actively growing weeds. Degree of control depends on: weed spectrum; weed size (if weeds are large, use higher spray volume); growing conditions at and following treatment; soil moisture; precipitation; and spray adjuvants. Treating weeds under stress or large weeds may result in only partial control. Stress may be caused by:

- abnormal weather (hot or cold)
- mechanical injury from cultivation
- drought
- water-saturated soil
- disease
- insect injury
- prior herbicide injury

Stress affects some weeds, such as pigweed, more than others. Delay application until stress passes and weeds start to grow again.

Severe stress (drought, disease, insect damage, or nutrient deficiency such as iron chlorosis) following application may also result in poor weed control.

Do not apply SYNCHRONY® XP if rain is expected within 1 hour or weed control may decrease.

**ROTATIONAL CROP GUIDELINES - ALL USES**

Crop rotation intervals noted in the table below are based on crops grown under favorable growing conditions. Crops grown under unfavorable environmental conditions, such as drought, nutrient deficiency, high salts, disease and insect pressure may demonstrate reduced tolerance to crop protection chemicals. When deciding on a particular crop to replant in your fields, carefully consider your particular soil and other field conditions (see IMPORTANCE OF SOIL pH section of this label).

- Important: Crops other than soybeans following a SYNCHRONY® XP application can vary in their sensitivity to low concentrations of SYNCHRONY® XP remaining in the soil. Rotational crop guidelines must be followed.

**Northern Region:** The states of Minnesota, South Dakota, Wisconsin (fields north of Interstate 90 between Lacrosse and Madison and fields north of Interstate 94 between Madison and Milwaukee), Iowa (fields inside the boundaries of the Clarion-Nicollet-Webster and Hamburg-Ida-Monona soil associations and fields located inside the historic floodplain of the Missouri River), Nebraska (fields north of route 30 and west of Route 281), and New York (fields north of Interstate 90).

**Central Region:** The states of Delaware, Illinois, Indiana, Iowa (fields located outside the boundaries of the Clarion-Nicollet-Webster and Hamburg-Ida-Monona soil associations and fields located outside the historic flood plain of the Missouri River), Kansas, Maryland, Michigan, Missouri (except the Bootheel),

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Nebraska (fields south of Route 30 and east of Route 281), New Jersey, New York (fields south of Interstate 90), Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin (fields south of Interstate 90 between Lacrosse and Madison and fields south of Interstate 94 between Madison and Milwaukee).

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

**Follow Recrop Interval 1 if the field is in the Central Region and either:**

- A maximum of 1.125 oz/acre of DuPont™ SYNCHRONY® XP was applied for the use season (all pH soils).

OR

- A maximum of 0.75 oz/acre of SYNCHRONY® XP in sequence with 0.33 oz/acre of DuPont™ CLASSIC® was applied for the use season (all pH soils).

OR

- A maximum of 0.75 oz/acre of SYNCHRONY® XP was applied in sequence with a maximum rate of 0.75 oz/acre of CLASSIC®, or a maximum of two applications of SYNCHRONY® XP at a rate of 0.75 oz/acre per application was applied or a single maximum application of 1.125 oz/acre (soils with pH less than 7.0).

**Follow Recrop Interval 2 if the field is in the Southern Region with:**

- All pH soils except those with pH greater than 7.0 in the Black Belt region of Alabama and Mississippi

AND

- A maximum of 0.75 oz/acre of SYNCHRONY® XP was applied in sequence with 0.75 oz/acre of CLASSIC®, or a maximum of two applications of SYNCHRONY® XP at a rate of 0.75 oz/acre per application was applied or a single maximum application of 1.125 oz.

**Follow Recrop Interval 3 if the field is in the Northern, Central or Southern Regions and either:**

- A maximum of 0.375 oz/acre SYNCHRONY® XP was applied during the use season (any soil pH).

OR

- A maximum of 0.75 oz/acre SYNCHRONY® XP was applied during the use season (soil pH less than 7.0).

**Follow Recrop Interval 4 for Spring PRE, PPI and Preplant applications if:**

- The field is located in the Central Region and greater than 1 oz/acre is applied to soils with a pH less than 7.0.

OR

- The field is located in the Southern Region and greater than 1.5 oz/acre is applied to soils with a pH less than 7.0.

**Rotational Interval (months)  
Following the Use of  
SYNCHRONY® XP\***

Crop	Interval 1	Interval 2	Interval 3	Interval 4
Soybeans	0	0	0	0
Cereal Grains, Pasture Grasses (such as Fescue and Ryegrass)	3	3	3	4
Dry Beans, Kidney Beans Peas, Snap Beans	9	9	9	12
Field Corn**(States in Northern and Central Regions)	9	--	9	--
Field Corn**(States of AR, KY, MO [Bootheel only], NC, OK, TN, and TX)	--	8	--	--
Field Corn**(States of AL, FL, GA, LA, MS, and SC)	--	7	--	--
Field Corn***	--	--	--	10
Popcorn	9	9	9/15§	--
Sorghum	9	9	9/15§	12
Tobacco (transplant)	9	9	9/15§	10
Tomato (transplant)	9	9	9/15§	10
Peanuts	15	6	6	8
Rice	15	9†	9	10
Cotton	9	8	9	10
Alfalfa	12	9	9	10
Clover	12	9	9	12
Cabbage	18	18	18	18
Canola (Rapeseed)	18	18	18	18
Cucumber	18	18	9	18
Flax	18	18	18	18
Lentils	18	18	18	18
Mustard	18	18	18	18
Pumpkins	18	18	9/18§	18
Sunflower	18	18	9	18
Sweet Corn	18	18	9†	18
Watermelon	18	18	9	18
Carrots∞	30	30	30	30
Onions∞	30	30	30	30
Potatoes∞ (including Sweet Potatoes)	30	30	30	30
Potatoes∞, Irish	--	8††	--	--
Sugar Beets∞	30	30	30	30
Any crop not listed∞	30	30	30	30

\* If SYNCHRONY® XP or the latter part of a sequential treatment containing chlorimuron ethyl (such as DuPont™ CLASSIC®) is applied after August 1, extend rotational crop intervals 2 months for alfalfa, clover, corn (non-IR), cotton, popcorn, rice, sorghum, tobacco, and tomato.

\*\*The term "Field Corn" is defined to include only that corn grown for grain or silage or for seed corn relative to the Rotational Crop Guidelines section of this label.

\*\*\*In the states of DE, KY, MD, MO Bootheel, NJ, NC, SC, TN, VA and WV, field corn may be recropped after 9 months if the SYNCHRONY® XP rate does not exceed 2.5 oz/ac.

† Rotational crop intervals are for processing Sweet Corn varieties only. The rotational crop interval for other Sweet Corn varieties is 18 months.

††For applications using 1.5 oz on soil with pH greater than 7.0, the rotation to rice is 18 months.

††† States of NC and VA in soils with organic matter greater than 1%.

∞ For rotation interval 4 only, carrots, onion, potato, sugarbeets, and any other crop not listed may be recropped after 18 months in the states of AL, AR, DE, GA, KY, LA, MD, MS, MO bootheel, NJ, NC, SC, TN, VA, and WV.

§ For the 0.375 oz/acre SYNCHRONY® XP rate, the rotation to popcorn, sorghum, tobacco (transplants), tomato (transplants) and pumpkins is 9 months. For the 0.75 oz/acre rate, use the longer rotations.

## THE IMPORTANCE OF SOIL PH

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

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

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

## SPRAYER PREPARATION AND CLEANUP

It is important that spray equipment is clean and free of previous pesticide deposits before using DuPont™ SYNCHRONY® XP and then properly cleaned out following application. Clean all application equipment before applying SYNCHRONY® XP. Follow the cleanup procedures specified on the label of the product previously sprayed. If no cleanup procedure is provided, use the procedure that follows. Immediately following applications of SYNCHRONY® XP, thoroughly clean all mixing and spray equipment to avoid subsequent crop injury.

### Note:

- When cleaning spray equipment before applying SYNCHRONY® XP, read and follow label directions for proper rinsate disposal of the product previously sprayed.
- Steam cleaning of aerial spray tanks will help to dislodge any visible pesticide deposits.
- When spraying or mixing equipment will be used over an extended period to apply multiple loads of SYNCHRONY® XP, partially fill the tank with fresh water at the end of each day of spraying, flush the boom and hoses, and allow to sit overnight.

## Cleanup Procedure

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

\* Equivalent amounts of an alternate strength ammonia solution or a tank cleaner recommended in the DuPont bulletin "Sulfonylurea Herbicides, A Guide to Equipment Cleanout," may be used.

## SPRAY DRIFT MANAGEMENT

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

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

### Importance of Droplet Size

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

### Controlling Droplet Size - General Techniques

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

### Controlling Droplet Size - Aircraft

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

### Boom Height

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

### Wind

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

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

### Temperature and Humidity

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

### Temperature Inversions

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

### Sensitive Areas

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

### Shielded Sprayers

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

### Air Assisted (air blast)

#### Field Crop Sprayers

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

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

### Air Assisted (air blast)

#### Tree and Vine Sprayers

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream. These sprayers are not suitable for applying herbicides.

## IMPORTANT PRECAUTIONS

- Do not graze treated fields or harvest for forage or hay.
- Do not apply this product through any type of irrigation equipment.
- SYNCHRONY® XP can be applied in tank mixtures with organophosphate insecticides or at any time preceding or following an application of an organophosphate insecticide on any STS™ or STS™/RR soybean variety. Tank mixtures of SYNCHRONY® XP plus organophosphate insecticides applied to STS™ or STS™/RR soybean varieties may result in minor transient crop response (i.e. stunting and/or chlorosis). Do not apply SYNCHRONY® XP within 14 days before or after an application of an organophosphate insecticide on any soybean variety that is not STS™ or STS™/RR, as severe crop injury may occur.

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

- Do not apply SYNCHRONY® XP or drain or flush equipment on or near desirable trees or other plants, 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.
- Many crops are sensitive to SYNCHRONY® XP. All direct or indirect contact (such as spray drift) with crops other than soybeans should be avoided.
- Thoroughly clean all application equipment immediately after use and prior to spraying crops other than soybeans.

## 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

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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

DuPont recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including 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 or site systems in your area.

## PESTICIDE STORAGE AND DISPOSAL

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

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

**Container Disposal: For Plastic Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**For Fiber Sacks:** Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by State and local authorities.

**For Fiber Drums With Liners:** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities.

If drum is contaminated and cannot be reused, dispose of in the same manner. **For Bags Containing Water Soluble Packets:** Do not reuse the outer box or the resealable plastic bag.

When all water-soluble packets are used, the outer packaging should be clean and may be disposed of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by open burning. If burned, stay out of smoke. If the resealable plastic bag contacts the formulated product in any way, the bag must be triple-rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer wrap as described above.

**For Metal Containers (non aerosol):** Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

**For Paper and Plastic Bags:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**When packaged in returnable and/or refillable containers:** Return the container clean and empty to the place of business from which this product was purchased.

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