

(A)	<b>United States Environmental Protection Agency</b> Office of Pesticide Programs (H7505C) Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number <h2 style="margin: 0;">253455</h2>
<b>Application for Pesticide:</b>			

Section I		
1. Company/Product Number 352-573	2. EPA Product Manager R. J. Taylor	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) DuPont Synchrony® STS® DF Herbicide	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) E.I. du Pont de Nemours and Company Barley Mill Plaza, Walker's Mill Bldg. 37 Wilmington, De 19880-0038 Attn: Tony E. Catka, WM6-174 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____  Product Name _____

Section II	
<input type="checkbox"/> Amendment - Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

Submission of notification change to label for DuPont Synchrony® STS® DF Herbicide, per PR Notice 95-2.

Attachments: • One copy of corrected and final label, identified as SL-235-2 9115 9/28/95 (H-62819)

- One copy of previous label, identified as SL-235 9105 9/28/95 (H-62800)
- Ref. letter from T. E. Catka to S. D. Hobgood, dated 11/15/95

Section III					
1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container		
* Certification must be submitted.		If "Yes," Unit Package wgt.      No. per container		If "Yes," Package wgt.      No. per container	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner In Which Label Is Affixed To Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other ( _____ ) <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled					

Section IV		
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Tony E. Catka	Title Product Registration Manager	Telephone No. (Include Area Code) (302) 992-6275
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)  _____
2. Signature 	3. Title Product Registration Manager	
4. Typed Name Tony E. Catka	5. Date November 15, 1995	

2 of 12

DuPont Agricultural Products  
Registration & Regulatory Affairs  
Walker's Mill, Barley Mill Plaza  
P. O. Box 80038  
Wilmington, DE 19880-0038  
Fax: (302) 992-6470



DuPont Agricultural Products

November 15, 1995

Ms. Sherada D. Hobgood  
Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
1921 Jefferson Davis Highway  
Arlington, VA 22202

**SUBJECT:** 1) Notification per PR Notice 95-2 of Change to Label for  
DuPont Synchrony® STS® DF Herbicide (EPA Reg. No. 352-573)  
2) Final Printed Label

Dear Ms. Hobgood:

I am enclosing a notification of changes made to the subject main label for Synchrony® STS® DF Herbicide. These changes are limited to two non-substantive modifications appearing on page five and after the cover page of the label as follows:

Page 5: Under "Rotational Crop Guidelines" remove "(Fields south of Interstate 80)" from the Illinois description in Region A section.

After Front Cover Page:

Insert corrected Highlights Bullet, point # 2, to read "1/2 ounce per acre"  
not "1/2 ounce per 4 acres"

This notification is consistent with the provisions of PR Notice 95-2 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling of the confidential statement of formula of this product. I understand that it is a violation of 18 U. S. C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 95-2 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 FIFRA.

Attached for your use are:

- Notification, EPA Form 8570-1 (OPP ID No. 253455)
- Current label, identified as SL-235 9105 9/28/95 (changes highlighted)
- One copy of proposed label, identified as SL-235-2 9115 9/28/95

Please contact me at (302) 992-6275 with any question on this matter.

Sincerely,

Tony E. Catka  
Product Registration Manager

TEC  
Enclosures

cc: R. J. Taylor (PM25)

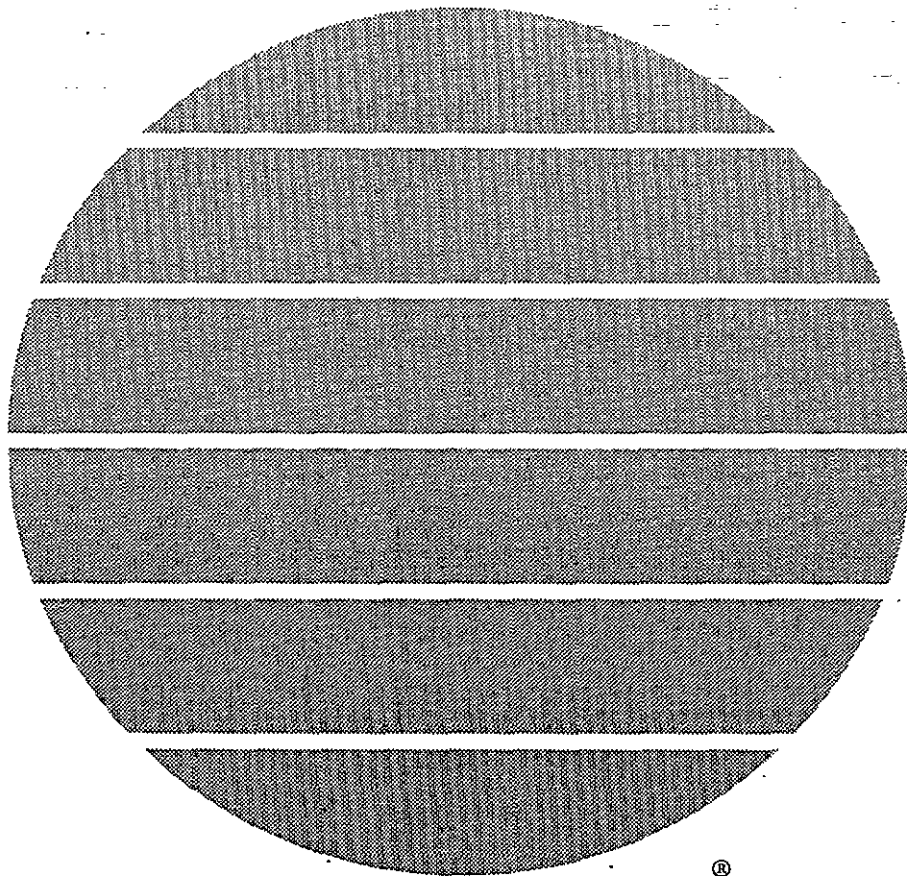
3 9 12  
H-62819



# Synchrony<sup>®</sup> STS<sup>®</sup> DF

herbicide

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

### SYNCHRONY® STS® DF HIGHLIGHTS

- SYNCHRONY STS DF provides selective postemergence weed control in soybean varieties designated as "STS".
- SYNCHRONY STS DF is applied at the rate of 1/2 ounce per acre. See Rate.
- SYNCHRONY STS DF may be tank mixed with ASSURE II, or other products for increased weed control.
- Include a crop oil concentrate and ammonium-based nitrogen fertilizer where required.
- SYNCHRONY STS DF may be applied by ground (broadcast or band) or by air.
- For ground application, apply in 10-25 gallons of water at 25-60 psi. Use flat fan nozzles to optimize SYNCHRONY STS DF performance.
- Apply to actively growing weeds at the recommended sizes. See Rate.
- Certain crop rotations apply. See Rotational Crop Guidelines.
- Certain environmental conditions, such as cool and dry, or hot and humid weather, affect the performance of SYNCHRONY STS DF. See Environmental Conditions.
- Consult label text for complete instructions. Always read and follow label directions for use.

### TABLE OF CONTENTS

- Directions For Use ..... 2
- Application Information ..... 2
  - Timing To Crop Stage ..... 2
  - Timing To Weeds ..... 2
  - Cultivation..... 2
  - Rate and Weeds Controlled ..... 2
  - Sequential Applications ..... 3
  - No-Till/Conservation Till ..... 3
  - Spray Additives ..... 3
  - Tank Mix Applications ..... 3
- Mixing Instructions ..... 4
- Application Equipment ..... 4
  - Ground Application ..... 4
  - Aerial Application ..... 5
- Environmental Conditions and
  - Biological Activity ..... 5
- Rotational Crop Guidelines ..... 5
- The Importance of Soil pH..... 6
- Sprayer Preparation and Cleanup ..... 6
- Spray Drift Management ..... 7
- Important Precautions ..... 8
- Information on Resistant Weeds ..... 8
- Storage and Disposal ..... 8
- Notice of Warranty ..... 8

5 7 12



# Synchrony® STS® DF

herbicide

### Dispersible Granules

Active Ingredients	By Weight
Chlorimuron ethyl	
Ethyl 2-[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate	31.8%
Thifensulfuron methyl	
Methyl 3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate	10.2%
Inert Ingredients	58.0%
TOTAL	100.0%

EPA Reg. No. 352 - 573

U.S. Patent No. 4,394,506, 4,547,215 & 4,481,029

## FOR USE ONLY ON SOYBEAN VARIETIES DESIGNATED AS "STS".

- Application to soybean varieties not designated as "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" varieties must be purchased from an authorized seed supplier.
- The "STS" designation indicates the soybean variety contains a proprietary trait that enhances the soybean's natural tolerance to DuPont soybean sulfonylurea herbicides. Information on "STS" soybean varieties may be obtained from your seed supplier or DuPont representative.

KEEP OUT OF REACH OF CHILDREN

## CAUTION

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution!** May be harmful if absorbed through skin. Causes (moderate) eye injury (irritation). Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and water after handling.

### STATEMENT OF PRACTICAL TREATMENT

**IF IN EYES:** Flush eyes with plenty of water. Call a physician if irritation persists.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

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

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Waterproof gloves.

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 STATEMENTS

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170 Section 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

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

### ENVIRONMENTAL HAZARDS

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

6 7 12

## 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.
- Waterproof gloves.
- Shoes plus socks.

Use only in the geographies identified in the "Rotational Crop Guidelines" section of this label.

Make only one application of SYNCHRONY STS DF per season.

## APPLICATION INFORMATION

DuPont SYNCHRONY STS DF herbicide is a dispersible granule formulation which readily dissolves in water.

### Timing To Crop Stage

SYNCHRONY STS DF may be applied any time after the first trifoliolate has opened but no later than 60 days before soybean maturity.

### Timing To Weeds

- Apply SYNCHRONY STS DF when weeds are young and actively growing (after the first true leaves have expanded, but before the weeds exceed the size indicated below).
- Applications made to weeds larger than the sizes indicated below, or to weeds under stress, may result in unsatisfactory control.
- Applications made after July 15 may result in less than satisfactory weed control due to the large sizes of the weeds and increased weather stress.

## 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.

## Rate and Weeds Controlled

Apply SYNCHRONY STS DF at a rate of 1/2 ounce per acre for selective postemergence broadleaf weed control.

When applied as directed, SYNCHRONY STS DF will control the following weeds:

Weed	Height (in inches)
Beggarticks (Bidens sp)	2-6
Bristly Starbur	2-3
Burcucumber*	2-3
Cocklebur	2-8
Common Milkweed (above ground portion)	2-6
Cowpea	2-5
Florida Beggarweed	2-5
Florida Pusley	1-3
Hemp Sesbania	2-5
Lambsquarters	2-4
Jerusalem Artichoke (above ground portion)	2-6
Jimsonweed	2-5
Marestail	2-5
Morningglory* (annual)	
Entireleaf	1-3
Ivyleaf	1-3
Pitted	1-3
Smallflower	1-3
Tall	1-3
Mustard	5**
Pigweeds	
Redroot (Rough)	2-8
Others	2-8
Ragweed	
Common	2-4
Giant*	2-4
Sicklepod*	1-3
Smartweed	
Ladysthumb	2-8
Pennsylvania	2-8
Sunflower	2-8
Wild Poinsettia	1-2
Yellow Nutsedge	2-3
Velvetleaf	2-8

\* See Split Applications section.

\*\* Diameter

When applied as directed, SYNCHRONY STS DF will suppress the following weeds:

Weed	Height (in inches)
Buffalobur	2-6
Canada Thistle	2-4
Kochia	1-3
Spurred Anoda	1-3
Purple Nutsedge	2-4
Venice Mallow	1-3
Waterhemp sp.	2-4

7 of 12

### Sequential Applications

A follow up application of DuPont Classic® Herbicide may be made 2-3 weeks after a SYNCHRONY STS DF 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.

### No-Till/Conservation Till

SYNCHRONY STS DF may be used for postemergence weed control in no-till/conservation till operations. A burndown treatment is recommended before planting. SYNCHRONY STS DF may be used alone, in a tank mix for postemergence broadleaf weed control, or tank mixed with postemergence grass herbicides such as DuPont ASSURE II Herbicide for total postemergence weed control. SYNCHRONY STS DF may be used in sequence with preemerge applications of DuPont CANOPY® herbicide for a pre-post No-Till herbicide program.

### Spray Additives

Applications of SYNCHRONY STS DF must include a crop oil concentrate. Refer to the DuPont bulletin "Approved Adjuvants for Use with DuPont Row Crop and Cereal Herbicides" for a list of approved adjuvants and suggested use rates for SYNCHRONY STS DF. 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.

### Crop Oil Concentrate

- Apply crop oil concentrate at 8 pt per 100 gal of spray solution (1.0% v/v).
- Use a good-quality, petroleum-based or methylated seed oil-based crop oil concentrate with at least 14% emulsifiers and 80% oil.

### Ammonium Nitrogen Fertilizer

In addition to a crop oil concentrate, an ammonium nitrogen fertilizer is recommended, and required where velvetleaf is present.

- Use a high-quality, liquid nitrogen fertilizer such as 28-0-0 or 30-0-0 at a rate of 4-8 pt per acre, or a 10-34-0 at a rate of 2-4 pt per acre.
- Alternatively, a high-quality, sprayable grade of ammonium sulfate (21-0-0) may be used at a rate of 2-4 lb per acre.
- Use the lower rate of fertilizer for spray volumes of less than 15 gal per acre.

### TANK MIX APPLICATIONS

Do not tank mix SYNCHRONY STS DF with any other pesticide or spray adjuvant except as specified on this or other supplemental labeling.

### SYNCHRONY STS DF AND POSTEMERGENCE GRASS HERBICIDES

SYNCHRONY STS DF may be tank mixed with postemergence grass herbicides such as DuPont ASSURE® II Herbicide.

The types of grass present determine the amount of ASSURE II to be tank mixed with SYNCHRONY STS DF. When applied as directed, a tank mix of SYNCHRONY STS DF and ASSURE II will control the following grasses:

### SYNCHRONY STS DF + 5 oz of ASSURE II per acre

Grass	Height (Inches)
Volunteer Corn	6 - 18
Shattercane	6 - 12
Giant Foxtail	2 - 4 (pretiller)
Seedling Johnsongrass	2 - 8

### SYNCHRONY STS DF + 7 oz of ASSURE II per acre

Grass	Height (Inches)
Giant Foxtail	4 - 8
Wild Proso Millet	2 - 6

### SYNCHRONY STS DF + 8 oz of ASSURE II per acre

Grass	Height (Inches)
Crowfoot Grass	2 - 6
Fall Panicum	2 - 6
Green Foxtail	2 - 4
Bristly Foxtail	2 - 4
Goosegrass	2 - 4
Itchgrass	2 - 8
Field Sandbur	2 - 6
Sprangletop	2 - 6
Volunteer Cereals	2 - 6
Wild Oats	2 - 6
Witchgrass	2 - 6

### SYNCHRONY STS DF + 10 oz of ASSURE II per acre

Grass	Height (Inches)
Junglerice	2 - 6
Rhizome Johnsongrass	10 - 24

- Include a crop oil concentrate with the tank mix of SYNCHRONY STS DF and postemergence grass herbicides such as ASSURE II. Use the rate listed in the Soybean Spray Additives section.
- SYNCHRONY STS DF may be tank mixed with other grass herbicides such as Poast Plus<sup>1</sup>, Select<sup>2</sup>, Fusion<sup>3</sup>, or Fusilade<sup>4</sup> 2000. Read and follow label directions for any tank mix product.
- Under certain conditions SYNCHRONY STS DF may reduce the activity of the grass herbicide. The broadleaf activity of SYNCHRONY STS DF will not be affected.
- For best results apply SYNCHRONY STS DF either 7 days before or 1 day after the grass herbicide. Refer to the grass herbicide label for precautions and specific use information.

### SYNCHRONY STS DF and 2,4-DB

SYNCHRONY STS DF may be tank mixed with 1-2 fl oz per acre of 2,4-DB for improved control of giant ragweed, annual morningglory and other broadleaf weeds.

- Applications to morningglory species must be made before the weeds are 4" tall.
- Soybeans must be at least 8" tall before applying SYNCHRONY STS DF in a tank mix with 2,4-DB.
- Applications of SYNCHRONY STS DF and 2,4-DB must include a nonionic surfactant at the rate of 2 pints per 100 gal (minimum of 0.125% v/v of actual nonionic surfactant) or crop oil concentrate at 8 pints per 100 gal of spray solution (1.0% v/v). See Spray Additives.
- Apply a tank mix of SYNCHRONY STS DF and 2,4-DB by ground only.

- In Kansas and Missouri (except the bootheel area), when conditions are excessively hot and dry (> 90°F and < 30% relative humidity), make applications at the rate of 2 fl oz of 2,4-DB and SYNCHRONY STS DF.
- The use of crop oil concentrate may increase temporary injury to soybeans.

Some crop response may occur 5-7 days after application of SYNCHRONY STS DF and 2,4-DB to soybeans under stress. Temporary yellowing, leaf crinkling, and/or soybean growth retardation may occur following application of SYNCHRONY STS DF and 2,4-DB. Under favorable growing conditions, the crop will quickly recover.

Consult the 2,4-DB label for use precautions.

**SYNCHRONY STS DF AND COBRA<sup>®</sup>**

SYNCHRONY STS DF may be tank mixed with "Cobra" at the rate of 8.0 to 12.5 fl oz of "Cobra" per acre. Use the higher rate of "Cobra" when weed populations are heavy or weeds approach the maximum size listed below.

Weed	Height (Inches)
Prickly Sida (teaweed)	up to 1 inch
Cocklebur	2 - 6
Hemp Sesbania	2 - 4
Morningglory	
Pitted	2 - 3
Ivyleaf	2 - 3
Entireleaf	2 - 3

- Include a nonionic surfactant at 2 pt per 100 gal of spray solution (minimum of 0.125% v/v actual surfactant).
- Do not use crop oil concentrate when tank mixing SYNCHRONY STS DF and "Cobra".
- Tank mix applications of SYNCHRONY STS DF and "Cobra" may not control weeds listed on the SYNCHRONY STS DF label as completely as applications of SYNCHRONY STS DF alone.
- Applications made with less than 20 gal per acre spray volume may result in erratic weed control.

**Tank Mix Precautions**

Do not tank mix SYNCHRONY STS DF with any other pesticide or spray adjuvant except as specified on this or other supplemental labeling.

**MIXING INSTRUCTIONS**

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of SYNCHRONY STS DF.
3. Continue adequate agitation.
4. SYNCHRONY STS DF 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 STS DF spray preparation within 24 hours of mixing to avoid product degradation.
6. If the mixture has settled, thoroughly reagitrate before using.

**APPLICATION EQUIPMENT**

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

**Broadcast Application**

- 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.
- Use flat fan nozzles at 25-60 psi for SYNCHRONY STS DF applications.
- Do not use flood, rain drop, whirl chamber, or controlled droplet applicator (CDA) type nozzles. Unacceptable crop injury, excessive spray drift, or poor weed control may result.
- For proper spray coverage adjust the boom and nozzle height according to the specifications listed by the nozzle manufacturer.

**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.
- For additional information on row banders, see DuPont bulletin, "Application Accuracy - Row Banders."

**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 STS DF 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 STS DF will provide complete control of susceptible weeds in 7-21 days. Suppressed plants may remain green but will be stunted and noncompetitive.

SYNCHRONY STS DF 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.

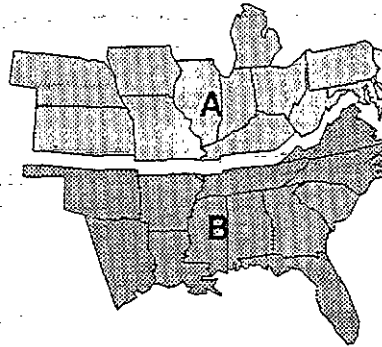
Severe stress (drought, disease, insect damage, or nutrient deficiency such as iron chlorosis) following application may also result in poor weed control.

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

### ROTATIONAL CROP GUIDELINES

- Important: Crops other than soybeans following a SYNCHRONY STS DF application can vary in their sensitivity to low concentrations of SYNCHRONY STS DF remaining in the soil. Rotational crop guidelines must be followed.
- When SYNCHRONY STS DF is applied in sequence with CANOPY, follow rotational crop guidelines listed on the CANOPY label.
- If SCEPTER, PURSUIT, or any product containing the active ingredients imazaquin or imazethapyr (such as SQUADRON or PASSPORT) is applied to soybeans the same year as SYNCHRONY STS DF, follow the more restrictive rotational crop guideline.

### Rotational Crop Groups A & B



**Region A:** 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, Kentucky, Maryland, Michigan (Fields south of Interstate 96 or per supplemental labeling.), Missouri (Except the Bootheel), Nebraska (Fields south of Route 30 and east of Route 281.), New Jersey, Ohio, Pennsylvania, and West Virginia.

**Region B:** The states of Alabama (Except the "Black Belt" where soil pH must be less than 7.0.), Arkansas, Florida, Georgia, 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, Texas (Fields east of Route 183), and Virginia.

#### Follow Recrop Interval 1 if:

- The field is located in a "Region A" state (all pH soils) AND, EITHER
- A maximum of one application of SYNCHRONY STS DF at a rate of 1/2 oz/acre for the growing season is applied, OR
- A maximum of one application of SYNCHRONY STS DF at a rate of 1/2 oz/acre in sequence with 1/3 oz/acre of Classic.

#### Follow Recrop Interval 1 if:

- The field is located in a "Region A" state with soil pH 7.0 or less AND
- A maximum rate of one application of SYNCHRONY STS DF at a rate of 1/2 oz/acre in sequence with a maximum rate of 3/4 oz/acre of CLASSIC.

#### Follow Recrop Interval 2 if:

- The field is located in a "Region B" state (all pH soils except those with pH greater than 7.0 in Virginia and the Black Belt region of Alabama and Mississippi) AND
- A maximum of one application of SYNCHRONY STS DF at a rate of 1/2 oz/acre in sequence with 3/4 oz/acre of CLASSIC is applied.

**Rotational Interval (months)  
Following the Use of SYNCHRONY STS DF\***

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

\* If SYNCHRONY STS DF or the latter part of a sequential treatment containing chlorimuron ethyl (such as 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.

**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**

Prior to application of SYNCHRONY STS DF, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all application equipment. Postponing action, even for a few hours, only makes effective cleanup more difficult. Failure to clean spraying equipment thoroughly may result in injury to subsequently sprayed crops.

When spraying multiple loads of SYNCHRONY STS DF over an extended period of time, rinse the equipment with clean water at the end of the day. Leave water in the equipment overnight to prevent deposits from drying on surfaces.

When applications of SYNCHRONY STS DF are completed and prior to using the sprayer and associated equipment for other products or for crops other than soybeans, thoroughly clean the equipment using the procedure below.

- STEP 1. Drain spray equipment. Thoroughly rinse sprayer, and flush hoses, boom and nozzles with clean water. Loosen and physically remove visible deposits.
- STEP 2. Fill the sprayer with clean water and add household ammonia (one gallon of 3% active for every 100 gallons of water) or correct amount of a DuPont approved cleaner\*. Flush hoses, boom and nozzles. Turn off the boom and top off the tank with clean water. Circulate through the spraying system for 15 minutes. Flush the hoses, boom and nozzles with the cleaning solution. Drain the tank.

STEP 3. Remove and clean nozzle, screens and strainers in a bucket of fresh cleaner and water.

STEP 4. Repeat STEP 2.

STEP 5. Thoroughly rinse the sprayer, hoses, boom and nozzles with clean water, several times.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or near desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

\* For additional information on sprayer cleanup and a listing of DuPont-approved cleaners, see DuPont Bulletin "A Guide To Application Equipment Cleanout For DuPont Sulfonyleurea Herbicides".

## SPRAY DRIFT MANAGEMENT

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

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

### IMPORTANCE OF DROPLET SIZE

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

### Controlling Droplet Size - General Techniques

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

### Controlling Droplet Size - Aircraft

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

### BOOM HEIGHT

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

## WIND

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

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

## TEMPERATURE AND HUMIDITY

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

## TEMPERATURE INVERSIONS

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

## SHIELDED SPRAYERS

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

## 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.