

352-592

8/31/2010

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

**OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION**

**AUG 31 2010**

Kristi Barnett  
U.S. Registration Coordinator  
DuPont Crop Protection  
Stine Haskell Research Center 300/429  
1090 Elkton Road P.O. Box 30  
Newark, DE 19714

Dear Ms. Barnett:

**SUBJECT:** DuPont Curzate 60DF Fungicide  
EPA Registration Number 352-592  
OPPIN Decision 435229  
Your submission of May 20, 2010 adding leaf lettuce and spinach

The amendment referred to above, submitted in connection with registration under section (3) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is acceptable provided you make the following changes:

**Page 1 – First Aid box:**

Take the Precautionary Statements, Engineering Control Statements, User Safety Recommendations, etc. out of the text box with the First Aid Statement.

**Page 1 – Precautionary Statements:**

Remove the exclamation mark following the signal word "Warning."

**Page 1 – Personal Protective Equipment:**

Change the heading "Personal Protective Equipment" to "Personal Protective Equipment (PPE)"  
Change "If no such instructions for washables . . ." to "If no such instructions for washables exist . . ."

**Page 2 – Directions for Use :**

Change “DuPont™ CURZATE® 60DF must be used only in accordance with recommendations on this label or in separately published DuPont recommendations or supplemental labels.” to “DuPont™ CURZATE® 60DF must be used only in accordance with directions on this label.”

**Page 2 – General Information :**

Change “CURZATE® 60DF is a locally systemic fungicide recommended in all states . . .” to “CURZATE® 60DF is a locally systemic fungicide labeled in all states . . .”

Immediately after “DO NOT use CURZATE® 60DF alone. Always tank-mix with a labeled rate of protectant fungicide.” add “Follow the more restrictive labeling of any tank mix partners. Do not tank mix with products that contain a prohibition on tank mixing.”

Change “Not for use in home plantings nor once any commercial crop is turned into UPick, Pick Your Own or similar operation.” to “Not for use in residential plantings or once any commercial crop is turned into UPick, Pick Your Own or similar operation.”

**Page 3 – Application Information –Mixing Instructions:**

Change the second sentence of item 4 from “CURZATE® 60DF should be thoroughly mixed with water before adding any other material.” to “Thoroughly mix CURZATE® 60DF with water before adding any other material.”

**Page 3 – Application Information –Tank/Mixture Compatibility:**

In the first paragraph, replace both instances of “recommendations” with “directions.”

Change the second sentence of the last paragraph from “Before applying any tank-mixture not specifically recommended on this label or other DuPont supplemental labeling, the safety to the target crop must be confirmed.” to from “Before applying any tank-mixture not specifically listed on this label, the safety to the target crop must be confirmed.”

**Page 3 – Use Rate and Application Timings – Lettuce, etc:**

Change “Use only in combination with a labeled rate of a protectant fungicide, such as EDBC (ethylenedisithiocarbamate) containing products for lettuce and copper-containing products for spinach and lettuce.” to “Use only in combination with a labeled rate of a protectant fungicide, such copper-containing products for spinach and lettuce.”

**Page 4 – Use Rate and Application Timings – Lettuce (Head and Leafy) and Spinach:**

Change “Use only in combination with a labeled rate of a protectant fungicide, such as EDBC Change the third bullet under “Application Information” from “Apply no more than 30 oz per 12 month period.” to “Apply no more than 30 oz CURZATE® 60DF per 12 month period.”

**Page 4 – Use Rate and Application Timings – Potatoes:**

Change “Use CURZATE® 60DF at 3.2 oz per acre for control of late blight (Phytophthora infestans). Use only in combination with a labeled rate of a protectant fungicide, such as a product containing mancozeb (e.g., MANZATE®), maneb (e.g., MANEX®), triphenyltin hydroxide (e.g., DuPont™ SUPER TIN®), or chlorothalonil.” to “Use CURZATE® 60DF at 3.2 oz per acre for control of late blight (Phytophthora infestans). Use only in combination with a labeled rate of a protectant fungicide, such as a product containing mancozeb (e.g., MANZATE®), triphenyltin hydroxide (e.g., DuPont™ SUPER TIN®), or chlorothalonil.”

Change the heading “Chemigation” to “Chemigation (For Use on Potatoes Only).”

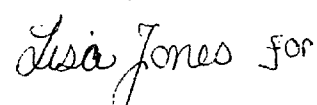
Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

As an alternative, you may refer consumers to the company's phone number or email address.

Submit one copy of your final printed labeling before you release the product for shipment. A stamped copy of the label is enclosed for your records.

If you have any questions, please contact Lisa Jones of my staff by phone at (703) 308-9424 or by e-mail at [jones.lisa@epa.gov](mailto:jones.lisa@epa.gov).

Sincerely,



Mary L. Waller  
Product Manager (21)  
Fungicide Branch

Enclosure: Stamped label



# DuPont™ Curzate® 60DF

fungicide

Dry Flowable

Active Ingredients	By Weight
Cymoxanil	60%
Inert Ingredients	40%
TOTAL	100%

EPA Reg. No. 352-592

EPA Est. No. \_\_\_\_\_

Nonrefillable Container

Net: \_\_\_\_\_

OR

Refillable Container

Net: \_\_\_\_\_

## KEEP OUT OF REACH OF CHILDREN WARNING AVISO

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 SWALLOWED:** Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING!** MAY BE FATAL IF SWALLOWED. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco.

(continued in next column)

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

AUG 31 2010

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

352-592

### PRECAUTIONARY STATEMENTS (continued) PERSONAL PROTECTIVE EQUIPMENT

**Applicators and other handlers must wear:**  
Long-sleeved shirt and long pants.  
Shoes plus socks.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

During aerial application, human flaggers must be in enclosed cabs.

### ENGINEERING CONTROL STATEMENTS

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

### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove personal protective equipment immediately after handling this product.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. 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.

## 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 over long-sleeved shirt and long pants.
- Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.
- If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.
- Shoes plus socks.

DuPont™ CURZATE® 60DF must be used only in accordance with recommendations on this label or in separately published DuPont recommendations or supplemental labels.

### GENERAL INFORMATION

CURZATE® 60DF is a locally systemic fungicide recommended in all states for the control of late blight on potatoes, potato seed pieces\*, and tomatoes\* and for downy mildew control on cucurbit crops\*, hops\*, lettuce (head and leafy), and spinach.

\*Except CA

**The restricted entry interval for cucurbit crops, lettuce (head and leafy), hops, spinach, tomatoes and potatoes is 12 hours.**

CURZATE® 60DF rapidly penetrates into plant tissues and is rainfast within 2 hours after application.

**DO NOT use CURZATE® 60DF alone. Always tank-mix with a labeled rate of protectant fungicide.**

Apply as a spray with ground, air, or chemigation (potatoes only) equipment, except as otherwise directed, using sufficient water to obtain thorough coverage of plants. Use only in commercial or farm plantings. Not for use in home

plantings nor once any commercial crop is turned into U-Pick, Pick Your Own or similar operation.

### CROP ROTATION RESTRICTIONS

Potatoes, tomatoes, cucurbit crops, lettuce (head and leafy), peppers, spinach, and hops may be re-planted anytime after CURZATE® 60DF applications. All other crops cannot be planted until 30 days after CURZATE® 60DF application.

### 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 disease forecasting models reach locally determined action levels. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treating specific pest/crop or site systems in your area.

An IPM program for preventing potato late blight is described below:

- Plant healthy seed.
- Use a late blight forecasting model or scouting reports.
- Remove volunteer potatoes from non-potato fields.
- Eliminate potato cull piles.
- Establish and maintain good hills which create a natural soil barrier against spores washed down from potato foliage.
- Start early with a protectant program.
- If conditions are favorable for late blight when the rows start to close within the row, initiate CURZATE® 60DF.
- Vine kill infected fields completely with vine desiccant or sulfuric acid to eliminate disease.
- Allow at least 14 days between vine kill and harvest in order to reduce spore load and minimize spore contact with tubers at harvest.
- Minimize tuber damage during harvest

This IPM approach based on CURZATE® 60DF is designed to prevent late blight infection. Due to the aggressive nature of the new strains of late blight no fungicide program will eradicate this disease once it is established.

### RESISTANCE MANAGEMENT

Repeated use of products for control of specific plant pathogens may lead to selection of resistant strains of fungi and result in a reduction of disease control. Therefore, tank-mixing Curzate with a labeled rate of protectant fungicide that has a different mode of action is required. The tank mix partner must be labeled for downy mildew or late blight control. This ensures optimum performance and further reduces the potential for resistance development. For guidance on the particular crop and disease control situation, consult your state extension specialist or official state recommendations.

## APPLICATION INFORMATION

### Application Volumes

- For conventional ground application, apply a minimum of 20 gallons per acre, increasing the spray volume as the plants mature to ensure thorough coverage of foliage.
- For air-assisted ground application, apply a minimum of 10 gallons per acre.
- For aerial application, apply a minimum of 5 gallons per acre.
- For chemigation information in potatoes only, see the potato section of this label.
- For potato seed piece treatment, see the Potato Seed Treatment section of this label.

### Pesticide Handling

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

### MIXING INSTRUCTIONS

1. Fill the tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of DuPont™ CURZATE® 60DF.
3. Continue agitation until the CURZATE® 60DF is fully dispersed, at least 5 minutes.
4. Once the CURZATE® 60DF is fully dispersed, maintain agitation and continue filling tank with water. CURZATE® 60DF should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partner(s), then add the necessary volume of any desired adjuvants. See tank mix partners labels for recommended adjuvants. CURZATE® 60DF does not require an adjuvant.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply CURZATE® 60DF spray mixture within 12 hours of mixing to avoid product degradation.
8. If CURZATE® 60DF and a tank mix partner are to be applied in multiple loads, pre-slurry the CURZATE® 60DF in clean water prior to adding to the tank. This will prevent the tank mix partner from interfering with the dissolution of the CURZATE® 60DF.

## TANK MIXTURE/COMPATIBILITY

CURZATE® 60DF must be tank mixed with a labeled rate of a protectant fungicide registered for use on the crop. Read and follow all the manufacturer's label recommendations for the companion products. If those recommendations conflict with this label, do not tank mix the product with CURZATE® 60DF.

CURZATE® 60DF is compatible with many commonly used fungicides, liquid fertilizers, herbicides, insecticides, adjuvants and biological control agents. However, the physical compatibility of CURZATE® 60DF with tank-mix partner(s) must be evaluated before use. To determine the physical compatibility, the recommended proportions of products must be added into a suitable container of water in the following sequence:

1. CURZATE® 60DF and other water dispersible granules
2. Wettable powders
3. Liquid Flowables
4. Emulsifiable concentrates
5. Adjuvants

Mix thoroughly and allow to stand for at least 20 minutes. If the combination remains mixed or can be re-mixed readily, it is considered physically compatible.

The crop safety of all potential tank-mixes, including additives and other pesticides, on all crops, has not been tested. Before applying any tank-mixture not specifically recommended on this label or other DuPont supplemental labeling, the safety to the target crop must be confirmed. To test for crop safety, apply the combination to a small area of the target crop in accordance with the label instructions to ensure that a phytotoxic response will not occur.

## USE RATES AND APPLICATION TIMINGS

### Cucurbits (Except CA)

#### Rate

Use CURZATE® 60DF at 3.2 to 5 oz. per acre for control of downy mildew (*Pseudoperonospora cubensis*). Use only in combination with a labeled rate of a protectant fungicide, such as products containing mancozeb (e.g., DuPont™ MANZATE®), maneb (e.g., DuPont™ MANEX®), copper hydroxide (e.g., DuPont™ KOCIDE®), or chlorothalonil.

#### Application Information

- Apply CURZATE® 60DF plus a protectant fungicide on a 5-7 day schedule.
- Do not apply CURZATE® 60DF within 3 days of harvest.
- Apply no more than 30 oz per 12 month period.

### Lettuce (Head and Leafy) and Spinach

#### Rate

Use CURZATE® 60DF on head lettuce at 3.2 to 5.0 oz per acre and on leafy lettuce at 5.0 oz per acre for control of downy mildew (*Bremia lactucae*). Use 5.0 oz per acre for control of spinach downy mildew (*Peronospora farinosa*). Use higher rate when disease pressure is more severe or when environmental conditions are conducive for disease development. Use only in combination with a labeled rate of a protectant fungicide, such as EBDC (ethylenebisdithiocarbamate) containing products for lettuce and copper-containing products for spinach and lettuce.

### Application Information

- Apply DuPont™ CURZATE® 60DF plus a protectant fungicide on a 5-7 day schedule.
- Apply no more than 30 oz per 12 month period.
- Do not apply CURZATE® 60DF within 3 days of harvest on head lettuce.
- Do not apply CURZATE® 60DF within 1 day of harvest for leafy lettuce and spinach.

### Hops (Except CA)

#### Rate

Use CURZATE® 60DF at 3.2 oz per acre for control of downy mildew (*Pseudoperonospora humuli*). Use only in combination with a labeled rate of a protectant fungicide, such as products containing copper hydroxide (e.g., DuPont™ KOCIDE®).

#### Application Information

- Apply CURZATE® 60DF plus a protectant fungicide on a 10-14 day schedule.
- Apply no more than 4 applications per 12 month period.
- Do not apply CURZATE® 60DF within 7 days of harvest.

### Tomatoes (Except CA)

#### Rate

Use CURZATE® 60DF at 3.2 - 5 oz per acre for control of late blight (*Phytophthora infestans*). If late blight is present, use the 5 oz per acre rate. Use only in combination with a labeled rate of a protectant fungicide, such as products containing mancozeb (e.g., DuPont™ MANZATE®), maneb (e.g., DuPont™ MANEX®), copper hydroxide (e.g., KOCIDE®), or chlorothalonil.

#### Application Information

- Apply CURZATE® 60DF plus a protectant fungicide on a 5-7 day schedule. If late blight is present, or environmental conditions are favorable for disease development, apply CURZATE® 60DF + the protectant fungicide on a 5 day schedule.
- Do not apply CURZATE® 60DF within 3 days of harvest.
- Apply no more than 30 oz per 12 month period.

### Potatoes

#### Rate

Use CURZATE® 60DF at 3.2 oz per acre for control of late blight (*Phytophthora infestans*). Use only in combination with a labeled rate of a protectant fungicide, such as a product containing mancozeb (e.g., MANZATE®), maneb (e.g., MANEX®), triphenyltin hydroxide or chlorothalonil.

#### Application Information

- Apply CURZATE® 60DF plus a protectant fungicide on a 5-7 day schedule when environmental conditions are favorable for disease development.
- Apply no more than 7 applications per 12 month period.
- Do not apply CURZATE® 60DF within 14 days of harvest.

- Late Blight Protection at Crop Emergence: Seed pieces contaminated with the late blight pathogen can produce plants with late blight symptoms which serve as local, within-field, sources of infection. To control late blight originating from infected seed pieces, apply CURZATE® 60DF at 3.2 oz per acre plus a protectant fungicide such as a product containing mancozeb (e.g., MANZATE®), maneb (e.g., MANEX®), triphenyltin hydroxide, or chlorothalonil. Make the first application at 90-95% crop emergence (plants 3-6 inches tall) before infected seedlings can spread disease to other plants. Make a subsequent application 7 days later. Delaying the first application until after 90-95% crop emergence may result in a reduced level of late blight control. For best results, the CURZATE® 60DF treatment should be applied as a directed band spray with nozzles adjusted to obtain complete spray coverage. For band spray applications, reduce the broadcast rate per acre in proportion to the width of the spray band.

#### Potato Seed Treatment (Except CA)

For seed treatment to suppress infection of emerging plant tissue by seed borne *Phytophthora infestans*, apply CURZATE® 60DF at 0.25 - 1.0 oz per hundred weight of cut seed pieces. CURZATE® 60DF must be combined with other fungicides which have registered seed treatment uses in potatoes.

Apply by thoroughly dipping the seed pieces in a concentrated slurry, or by mist seed treating equipment. For best results the seed piece must be completely and uniformly covered with fungicide. Thoroughly clean and sanitize cutting machines, knives, trays, tables, barrels, equipment trucks and planters before cutting and planting seed pieces.

Do not use treated seed pieces for food or feed purposes.

#### Chemigation

Apply CURZATE® 60DF only through sprinkler irrigation systems (such as center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems).

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Specific Instructions for Public Water Systems:

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to

pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **Specific Instructions for Sprinkler Irrigation Systems:**

1. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Good agitation is required in the injection tank.
9. In moving systems, apply specified dosage of DuPont™ CURZATE® 60DF as a continuous injection. In nonmoving systems inject CURZATE® 60DF for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.

10. Mix the amount of CURZATE® 60DF needed for acreage to be treated into the quantity of water determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For nonmoving systems inject into system for the time established during calibration.

11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all CURZATE® 60DF is flushed from system.

### **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 AND HEIGHT**

- **Boom Length (aircraft)** - The boom length should not exceed 3/4 of the wing length, using shorter booms decreases drift potential. For helicopters use a boom length and position that prevents droplets from entering the rotor vortices.
- **Boom Height (aircraft)** - Application more than 10 ft above the canopy increases the potential for spray drift.



- **Boom Height (ground)** Setting the boom at the lowest height which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce.

## **WIND**

Drift potential increases at wind speeds of less than 3 mph (due to variable direction and 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.

## **SURFACE TEMPERATURE INVERSIONS**

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface 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 a surface 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.

## **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Keep container closed when not in use. Store product in original container only, away from other pesticides, fertilizer, food or feed.

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

**CONTAINER HANDLING:** Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

**Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds):** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds):** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down):** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners:** Nonrefillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

**Refillable Fiber Drums With Liners:** Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with [DuPont Curzate 60DF] containing [cymoxanil] only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Disposing of Fiber Drum and/or Liner: Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

**All Other Refillable Containers:** Refillable container. Refilling Container: Refill this container with [DuPont Curzate 60DF] containing [cymoxanil] only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use the container, contact DuPont at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact DuPont at the number below for instructions. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Outer Foil Pouches of Water Soluble Packets (WSP):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously.

Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact DuPont at 1-800-441-3637, day or night.

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WARRANTY AND LIABILITY**

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

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

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

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

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