



# DuPont™ Approach® Prima

FUNGICIDE

GROUP	3 - 11	FUNGICIDE
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## Suspension Concentrate

### Active Ingredients

	<i>By Weight</i>
Picoxystrobin	
Methyl (αE)-α-(methoxymethylene)-2-[[[6-(trifluoromethyl)-2-pyridinyl]oxy]methyl]benzeneacetate	17.94%
Cyproconazole	
α-(4-chlorophenyl)-α-(1-cyclopropylethyl)-1H-1,2,4-triazole-1-ethanol	7.17%
<b>Other Ingredients</b>	<b>74.89%</b>
<b>TOTAL</b>	<b>100.00%</b>

Contains 1.67 pounds of picoxystrobin and 0.67 pounds of cyproconazole per gallon of product

EPA Reg. No. 352-883

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

### Nonrefillable Container

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

OR

### Refillable Container

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

E. I. duPont de Nemours and Company

Chestnut Run Plaza

974 Centre Road

Wilmington, DE 19805

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

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

### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
  - Shoes plus socks
  - Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

## 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 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 clothing/PPE 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 put on clean clothing.

## ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates, including shrimp and oysters. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated 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 disposing of equipment washwater or rinsate.

**SURFACE WATER ADVISORY:** Picoxystrobin has the potential to contaminate surface water through spray drift. Under some conditions, picoxystrobin may also have a high potential for runoff into surface water, especially in areas with poorly-draining soils, and areas with shallow water tables. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water will reduce the potential for runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

**GROUND WATER ADVISORY:** Cyproconazole demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

## DIRECTIONS FOR USE

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

DuPont™ APROACH® PRIMA fungicide, referred to below as DuPont™ APROACH® PRIMA, APROACH® PRIMA fungicide or APROACH® PRIMA, must be used only in accordance with instructions on this label, in separately issued labeling or exemptions under FIFRA (Supplemental Labels, Special Local Need Registration, FIFRA Section 18 exemptions), or as otherwise permitted by FIFRA. Always read the entire label including the Limitation of Warranty and Liability.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

## 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 the label about personal protective equipment (PPE), and restricted-entry interval, and notification to workers (as applicable). 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
- Shoes and socks
- Chemical resistant gloves made of any waterproof material

## **PRODUCT INFORMATION**

DuPont™ APROACH® PRIMA is a broad-spectrum fungicide for control of foliar plant diseases and has preventive, curative, and systemic activity. APROACH® PRIMA must be applied in a regularly scheduled protective spray program in rotation with other fungicides. When used in a disease control program, APROACH® PRIMA improves plant health, vigor, and yield. See directions below for specific crop/disease instructions.

APROACH® PRIMA rapidly penetrates into plant tissues and is rainfast within 1-hour after application.

This product may be applied to crop sites that contain areas of temporary surface water caused by collection of water between planting beds, in equipment ruts, or in other depressions caused by management activities.

## **INTEGRATED PEST MANAGEMENT**

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when disease forecasting models 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.

## **RESISTANCE**

APROACH® PRIMA contains the active ingredients picoxystrobin and cyproconazole, which are Group 11 and Group 3 fungicides based on the mode of action classification system of the Fungicide Resistance Action Committee of Croplife International.

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. A disease management program that includes rotation and/or tank mixing with fungicides that have a different mode of action is essential to reduce the risk of fungicide resistance development. When making applications to pathogens that have tolerance or resistance to APROACH® PRIMA and other strobilurin or triazole fungicides, tank mix with a fungicide with a different mode-of-action that is effective for controlling the target disease. For guidance on a particular crop and disease control situation, consult your agricultural dealer, consultant, applicator or appropriate state agricultural extension service representative for specific area practices and/or requirements.

## **APPLICATION INFORMATION**

### **APPLICATION EQUIPMENT**

APROACH® PRIMA may be applied with ground, air or chemigation equipment.

### **APPLICATION VOLUME**

Use a sufficient volume of water to ensure thorough coverage when applying APROACH® PRIMA as a broadcast spray. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern. An increased volume of water may be required as foliage density increases.

### **TANK MIXTURES**

Do not use an adjuvant or crop oil when applying APROACH® PRIMA on corn between the V8 and VT stages of growth.

The crop safety of all tank mixtures with APROACH® PRIMA which may include physically compatible pesticides, fertilizers, adjuvants, and/or additives, has not been tested. When considering the use of a tank mixture on a labeled crop without prior experience, or which is not specifically described on APROACH® PRIMA product labeling or in other DuPont product use instruction, it is important to understand crop safety. To test for crop safety prepare a small volume of the intended tank mixture, apply it to an area of the target crop as directed by both this and the tank mix partner product labels, and observe the treated crop to ensure that a phytotoxic response does not occur. DuPont will not be responsible for any crop injury arising from the use of a tank mixture that is not specifically described on APROACH® PRIMA product labeling or in other DuPont product use instruction.

Research indicates that some materials including oils, surfactants, adjuvants and pesticide formulations when applied individually, sequentially, or in tank mixtures may solubilize the plant cuticle, facilitate penetration into plant tissue, and increase the potential for crop injury.

Always follow the tank mix instructions of the product label that is most restrictive.

Consult a DuPont representative or local agricultural authorities for more information concerning tank mixtures.

### **Physical Compatibility**

APROACH® PRIMA is physically compatible with many commonly used fungicides, herbicides, insecticides, biological control products, liquid fertilizers, non-ionic surfactants, crop oils, methylated seed oils and drift control additives. However, since the formulations of products change, it is important to test the physical compatibility of desired tank mixes and check for undesirable physical effects, including settling out or flocculation. To determine physical compatibility, add the proportions of the tank mix products and water to a small container, mix thoroughly and allow to stand for 20 minutes. If the combination remains mixed, or can be re-mixed readily, it may be considered physically compatible.

## MIXING INSTRUCTIONS

1. Fill clean spray tank 1/4 - 1/2 full of water.
2. While agitating, add the required amount of DuPont™ APROACH® PRIMA, continuing agitation until the product is completely dispersed.
3. Continue filling the tank, with agitation, adding desired additives or tank mix partners, following the sequence listed below in 'tank mixing sequence'.

### Tank Mixing Sequence

Add different formulation types in the sequence indicated below. Allow time for complete mixing and dispersion after addition of each product.

1. water-soluble bag
2. water-dispersible granules
3. wettable powders
4. water-based suspension concentrates (APROACH® PRIMA)
5. water-soluble concentrates
6. oil-based suspension concentrates
7. emulsifiable concentrates
8. adjuvants, surfactants, and oils
9. soluble fertilizers
10. drift control additives

### CHEMIGATION

Apply APROACH® PRIMA 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 non-uniform distribution of treated water. If you have questions about calibration, contact your 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, must shut the system down and make necessary adjustments should the need arise.

#### Specific Instructions for Public Water Systems:

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.

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

#### Specific Instructions for Sprinkler Irrigation Systems:

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.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area to be treated.

Good agitation is required in the injection tank. In moving systems, apply specified dosage of DuPont™ APROACH® PRIMA as a continuous injection. In nonmoving systems inject APROACH® PRIMA for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.

Mix a label specified amount of APROACH® PRIMA 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.

Stop injection equipment after completing treatment; continue to operate irrigation equipment until all APROACH® PRIMA is flushed from the system.

## POST-EMERGENCE APPLICATION TIMING AND USE RATES

**Table 1:** DuPont™ APROACH® PRIMA Labeled Crop and Crop Groups, Pre-Harvest Intervals, Maximum Single Application Rates, and Total Crop Use Rates.

Crop	Minimum Time from last Application to Harvest (PHI days or crop stage)	Maximum Rate per Acre per Application (fluid ounces product)	Maximum Product per Acre per Crop (fluid ounces product)
Cereals: wheat and triticale only	45-days, grain 21-days, hay and forage	6.8	6.8
Corn: field, seed	30-days grain and ear, 21-days, silage	6.8	6.8
Soybean forage, hay and grain	14-days forage, hay 30-days grain	6.8	13.6 (grain) 6.8 (forage and hay)

**Table 2:** APROACH® PRIMA Specific Crop/Crop Group Disease Treatment Use Rates, and Treatment Instructions.

Crop	Disease Controlled or Suppressed	Rate (fluid ounces product per acre)	Treatment Instructions
Cereals: wheat and triticale only	Leaf and glume blotch ( <i>Stagonospora spp.</i> , <i>Septoria spp.</i> ) Powdery mildew ( <i>Erysiphe graminis f. sp. tritici</i> ) Tan spot ( <i>Pyrenophora tritici-repentis</i> )	3.4	Apply early season for preventive disease control/suppression. Additional treatments should be made depending on disease pressure and environmental conditions.
	Black point ( <i>Alternaria spp.</i> , <i>Helminthosporium spp.</i> ) Leaf and glume blotch ( <i>Stagonospora spp.</i> , <i>Septoria spp.</i> ) Powdery mildew ( <i>Erysiphe graminis f. sp. tritici</i> ) Rusts ( <i>Puccinia spp.</i> ) Spot blotch ( <i>Cochliobolus sativus</i> ) Tan spot ( <i>Pyrenophora tritici-repentis</i> )	3.4 to 6.8	Begin applications prior to disease development. Use higher specified rate when disease pressure is high. To optimize yields in cereals, it is important to protect the flag leaf from foliar diseases. For optimizing yield and flag leaf disease control, apply APROACH® PRIMA at Feeke's 9, 'flag leaf out'.
	Disease suppression Scab ( <i>Fusarium spp.</i> )		

### RESTRICTIONS

- Apply no more than two sequential applications of a picoxystrobin containing product before switching to a fungicide with a different mode of action. The minimum re-treatment interval in cereals for APROACH® PRIMA is 14 days.
- Minimum time (PHI) between the last application and harvest for grain is 45-days and for forage or hay is 21-days.
- Do not exceed 6.8 fluid ounces product per acre per crop.
- When applied alone or in combination with other products containing picoxystrobin, do not apply more than 0.585 pounds of picoxystrobin active ingredient per acre per year to wheat and triticale.
- When applied alone or in combination with other products containing cyproconazole, do not apply more than 0.036 pounds of active ingredient cyproconazole per acre per year to wheat and triticale.

Crop	Disease Controlled or Suppressed	Rate (fluid ounces product per acre)	Treatment Instructions
Corn: field, seed	Anthraxnose leaf blight and stalk rot ( <i>Colletotrichum graminicola</i> ) Eye spot ( <i>Aureobasidium zeae</i> , <i>Kabatiella zeae</i> )	3.4	Apply early season for preventive disease control/suppression. Additional treatments should be made depending on disease pressure and environmental conditions.
	Gray leaf spot ( <i>Cercospora zeae-maydis</i> ) Leaf spots ( <i>Alternaria spp.</i> ) Northern corn leaf blight ( <i>Setosphaeria turcica</i> , <i>Exserohilum turcicum</i> ) Northern corn leaf spot ( <i>Cochliobolus carbonum</i> ) Physoderma brown spot ( <i>Physoderma maydis</i> ) Rust, common ( <i>Puccinia sorghi</i> ) Rust, southern ( <i>Puccinia polyspora</i> ) Southern corn leaf blight ( <i>Cochliobolus heterostrophus</i> , <i>Bipolaris maydis</i> ) Yellow leaf blight ( <i>Phyllosticta maydis</i> )	3.4 to 6.8	Begin applications prior to disease development. Use higher specified rate and shorter interval when disease pressure is high.

#### RESTRICTIONS

- Apply no more than two sequential applications of a picoxystrobin containing product before switching to a fungicide with a different mode of action. The minimum re-treatment interval in corn for DuPont™ APROACH® PRIMA is 7 days.
- Do not tank mix APROACH® PRIMA with an adjuvant or crop oil when spraying corn between the V8 and VT stages of growth.
- Minimum time (PHI) between the last application and harvest for grain or ear is 30-days and for silage is 21-days.
- Do not exceed 6.8 fluid ounces product per acre per crop.
- When applied alone or in combination with other products containing picoxystrobin, do not apply more than 0.585 pounds of picoxystrobin active ingredient per acre per year to corn.
- When applied alone or in combination with other products containing cyproconazole, do not apply more than 0.036 pounds of active ingredient cyproconazole per acre per year to corn.

Crop/Crop Group	Disease Controlled or Suppressed	Rate (fluid ounces product per acre)	Treatment Instructions
Soybean	Aerial web blight ( <i>Rhizoctonia solani</i> ) Anthraxnose ( <i>Colletotrichum truncatum</i> ) Alternaria leaf spot ( <i>Alternaria spp.</i> ) Brown Spot ( <i>Septoria glycines</i> ) Cercospora blight and leaf spot, purple seed stain ( <i>Cercospora kikuchii</i> ) Downy mildew ( <i>Peronospora manshurica</i> ) Frogeye leafspot ( <i>Cercospora sojina</i> ) Pod and stem blight ( <i>Diaporthe phaseolorum</i> ) Powdery mildew ( <i>Erysiphe spp.</i> ) Rust ( <i>Puccinia spp.</i> , <i>Phakospora spp.</i> ) Target Spot ( <i>Corynespora cassiicola</i> )	5 to 6.8	Begin applications prior to disease development and continue on a 14 to 28-day interval. Use higher specified rate and shorter interval when disease pressure is high.

#### RESTRICTIONS

- Make no more than two sequential applications of a picoxystrobin containing product before switching to a fungicide with a different mode of action. The minimum re-treatment interval in soybeans for APROACH® PRIMA is 14 days.
- Minimum time (PHI) between last application and harvest of grain is 30-days, forage, and hay is 14-days.
- Do not exceed 13.6 fluid ounces product per acre per crop.
- Do not use soybean forage or hay as livestock feed if making more than one application at 6.8 fluid ounces product per acre.
- When applied alone or in combination with other products containing picoxystrobin, do not apply more than 0.585 pounds of picoxystrobin active ingredient per acre per year to soybean. Do not apply more than 0.195 lb of picoxystrobin active ingredient per acre per year to soybean if forage or hay are fed to livestock.
- When applied alone or in combination with other products containing cyproconazole, do not apply more than 0.072 pounds of active ingredient cyproconazole per acre per year to soybean. Do not apply more than 0.036 pounds of cyproconazole active ingredient per acre per year to soybean if forage or hay are fed to livestock.

## **ADDITIONAL INSTRUCTIONS, PRECAUTIONS AND RESTRICTIONS FOR ALL USES**

### **IMPORTANT RESTRICTIONS**

- Do not use DuPont™ APROACH® PRIMA on residential plantings.
- Not for sale, sale into, distribution and/or use in Nassau and Suffolk counties of New York State.
- For aerial application in New York State, DO NOT apply within 100 feet of aquatic habitats (such as, but not limited to lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

### **SPRAY DRIFT RESTRICTIONS**

- Where states have more stringent regulations they must be observed.

### **AERIAL APPLICATIONS**

- Applicators are required to use upwind swath displacement, and displacement distance must increase with increasing drift potential.
- Applications into temperature inversions are prohibited.
- Spray must be released at the lowest height consistent with pest control objectives and flight safety.

### **GROUND APPLICATIONS**

- Applications into temperature inversions are prohibited.
- Apply spray at the lowest height that is consistent with pest control objectives.

See Spray Drift Management Section of this label for additional information.

### **CROP ROTATION RESTRICTIONS**

Soybeans, corn, wheat or triticale may be replanted immediately, if crop is lost.

Cotton and cereal grains other than wheat and triticale can be planted 180 days after the last application of APROACH® PRIMA.

All other crops can be planted 270 days after the last application of APROACH® PRIMA

### **IMPORTANT PRECAUTIONS**

Not all crops within a crop group, and not all varieties, cultivars or hybrids of crops, have been individually tested for crop safety. It is not possible to evaluate for crop safety all applications of APROACH® on all crops within a crop group, on all varieties, cultivars, or hybrids of those crops, or under all environmental conditions and growing circumstances. To test for crop safety, apply the product in accordance with the label instructions to a small area of the target crop to ensure that a phytotoxic response will not occur, especially where the application is a new use of the product by the applicator.

### **EQUIPMENT CLEANING**

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation.

Dispose of waste rinse water in accordance with local regulations.

### **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 drift management strategy is to apply the largest droplets which are consistent with pest control objectives. 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.

A droplet size classification system describes the range of droplet sizes produced by spray nozzles. The American Society of Agricultural and Biological Engineers (ASABE) provide a Standard that describes droplet size spectrum categories defined by a number of reference nozzles (fine, coarse, etc.). Droplet spectra resulting from the use of a specific nozzle may also be described in terms of volume mean diameter (VMD). Coarser droplet size spectra have larger VMD's and lower drift potential.

### **CONTROLLING DROPLET SIZE - GROUND APPLICATION**

- Nozzle Type - Select a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. The use of low-drift nozzles will reduce drift potential.



- Pressure - The lowest spray pressures recommended for the nozzle produce the largest droplets. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, using a higher-capacity nozzle instead of increasing pressure results in the coarsest droplet spectrum.
- Flow Rate/Orifice Size - Using the highest flow rate nozzles (largest orifice) that are consistent with pest control objectives reduces the potential for spray drift. Nozzles with higher rated flows produce coarser droplet spectra.

### **CONTROLLING DROPLET SIZE – AIRCRAFT**

- Nozzle Type - Solid stream, or other low drift nozzles produce the coarsest droplet spectra.
- Number of Nozzles - Using the minimum number of nozzles with the highest flow rate that provide uniform coverage will produce a coarser droplet spectrum
- Nozzle Orientation - Orienting nozzles in a manner that minimizes the effects of air shear will produce the coarsest droplet spectra. For some nozzles such as solid stream, pointing the nozzles straight back parallel to the airstream will produce a coarser droplet spectrum than other orientations.
- Pressure – Selecting the pressure that produces the coarsest droplet spectrum for a particular nozzle and airspeed reduces spray drift potential. For some nozzle types such as solid streams, lower pressures can produce finer droplet spectra and increase drift potential

### **BOOM LENGTH (AIRCRAFT), AND APPLICATION HEIGHT**

- Boom Length (aircraft) - Using shorter booms decreases drift potential. Boom lengths are expressed as a percentage of an aircraft's wingspan or a helicopter's rotor blade diameter. Shorter boom length and proper positioning can minimize drift caused by wingtip or rotor vortices.
- Application Height (aircraft) - Applications made at the lowest height that are consistent with pest control objectives and the safe operation of the aircraft will reduce the potential for spray drift.
- Application Height (ground) - Applications made at the lowest height consistent with pest control objectives, and that allow the applicator to keep the boom level with the application site and minimize bounce, will reduce the exposure of spray droplets to evaporation and wind, and reduce spray drift potential.

### **WIND**

Drift potential is lowest when applications are made in light to gentle sustained winds (2-10 mph), which are blowing in a constant direction. Many factors, including droplet size and equipment type also determine drift potential at any given wind speed. AVOID GUSTY OR WINDLESS CONDITIONS.

Local terrain can also influence wind patterns. Every applicator is expected to be familiar with local wind patterns and how they affect spray drift.

### **TEMPERATURE AND HUMIDITY**

Setting up equipment to produce larger droplets to compensate for droplet evaporation can reduce spray drift potential. Droplet evaporation is most severe when conditions are both hot and dry.

### **SURFACE TEMPERATURE INVERSIONS**

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which may cause 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. Mist or fog may indicate the presence of an inversion in humid areas. Inversions may also be identified by producing smoke and observing its behavior. Smoke that remains close to the ground, or moves laterally in a concentrated cloud under low wind conditions indicates a surface inversion. 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 minimizing drift potential, 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, that it is configured properly, and that drift potential has been minimized.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Read the specific crop use and application equipment instructions to determine if an air assisted field crop sprayer can be used.

### **SENSITIVE AREAS**

Making applications when there is a sustained wind moving away from adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is an effective way to minimize the effect of spray drift.

## DRIFT CONTROL ADDITIVES

Using product compatible drift control additives can reduce drift potential. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the additive's label. If using an additive that increases viscosity, ensure that the nozzles and other application equipment will function properly with a viscous spray solution. Preferred drift control additives have been certified by the Chemical Producers and Distributors Association (CPDA).

### STORAGE AND DISPOSAL

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

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

**PESTICIDE DISPOSAL:** Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

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

**Nonrefillable Rigid Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons):** 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 and drain for 10 seconds after the flow begins to drip. 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 Rigid Plastic and Metal Containers (Capacity Greater Than 5 Gallons):** 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 Rigid 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.

**All Refillable Containers:** Refillable container. Refilling Container: Refill this container with DuPont™ APROACH® PRIMA Fungicide containing Picoxystrobin 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 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.

Do not transport if 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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## **LIMITATION OF WARRANTY AND LIABILITY**

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

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

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

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For product information call: 1-888-6-DUPONT [1-888-638-7668]

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