

352-730

04/30/2008

1/10



## U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505C)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

352-730

Date of Issuance:

APR 30 2008

## NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

DuPont Altacor Insecticide

## Name and Address of Registrant (include ZIP Code):

E.I. du Pont de Nemours & Company  
Crop Protection  
P.O. Box 30  
Newark, DE 19714

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/ registration review/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the following label changes before you release the product for shipment:
  - a. Revise the EPA Registration Number to read, "EPA Reg. No. 352-730".
  - b. Within the **ENVIRONMENTAL HAZARDS** section of the label, revise the sentence "This pesticide is toxic to aquatic invertebrates, oysters, or shrimp." to read "This pesticide is toxic to aquatic invertebrates, oysters and shrimp."
  - c. Add the full address to the label. It is recommended that the company name and address be moved to the front panel. In addition, the company's Internet address must be deleted from the label.

Signature of Approving Official:

Meredith F. Laws; Branch Chief

Insecticide-Rodenticide Branch, Registration Division (7505P)

Date:

APR 30 2008

- d. On page two of the label, revise the sentence "*ALTACOR insecticide is a water dispersible granule that can be applied as a foliar spray, using ground or aerial application to control many important insects.*" to read "*ALTACOR insecticide is a water dispersible granule that can be applied as a foliar spray, using ground or aerial application to control listed insects.*"
- e. Within the **APPLICATION** section of the label, revise the sentence "*Apply follow-up treatments of DuPont ALTACOR, as needed, to keep pest populations within threshold limits.*" to read "*Apply follow-up treatments of DuPont ALTACOR, as specified, to keep pest populations within threshold limits.*"
2. The data requirements for storage stability (830-6317) and corrosion characteristics (830-6320) have not been satisfied, and must be submitted within eighteen months of the date of this letter.
3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Meredith F. Laws  
Branch Chief  
Insecticide-Rodenticide Branch  
Registration Division (7505P)

Enclosure



# DuPont™ Altacor® insecticide

with the active ingredient  
**RYNAXYPYR® insecticide**

GROUP	28	INSECTICIDE
-------	----	-------------

ALTACOR® is a water dispersible granule.

Active Ingredient	By Weight
Chlorantraniliprole	
3-Bromo-N-[4-chloro-2-methyl-6- [(methylamino)carbonyl]phenyl]-1- (3-chloro-2-pyridinyl)-1H-pyrazole- 5-carboxamide	35.0%
Inert Ingredients	65.0%
TOTAL	100.0%

EPA Reg. No. 352-XXX

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

**ACCEPTED**  
**with COMMENTS**  
**In EPA Letter Dated:**

**APR 30 2008**

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

**352-730**

## PRECAUTIONARY STATEMENTS

### KEEP OUT OF REACH OF CHILDREN

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

### FIRST AID

For questions regarding emergency medical treatment, you may contact 1-800-441-3637 for information.

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

When used as directed this product does not present a hazard to humans or domestic animals.

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes plus socks.

After the product has been diluted in accordance with label directions for use, shirt, pants, socks, and shoes are sufficient Personal Protective Equipment. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates, oysters, or shrimp. Do not apply directly to water. Drift and runoff may be hazardous to aquatic organisms in water adjacent to use sites.

#### Surface Water Advisory-

This product may contaminate water through runoff. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

#### Ground Water Advisory-

This chemical has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

## DIRECTIONS FOR USE

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

## RESTRICTIONS

- Use this product only in commercial and farm plantings.
- Not for use in home plantings.
- Not for use on ornamental plants or plants being grown for ornamental purposes.
- May be used on crops on this label grown for seed production.
- Do not use in greenhouses.
- Do not apply DuPont™ ALTACOR® through any type of irrigation system.

### AGRICULTURAL USE REQUIREMENTS

ALTACOR® insecticide must be used 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, restricted-entry interval, and notification to workers (as applicable).

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.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

For early entry into 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, wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

ALTACOR® insecticide must be used only in accordance with directions on this label or in separate DuPont supplemental labeling that may be made temporarily available through local distributors, as a result of new EPA approvals. DuPont will not be responsible for losses or damages resulting from use of this product in any manner not specifically stated on this label or other labels or bulletins published by DuPont. User assumes all risks associated with such non-specified use.

ALTACOR® insecticide is a water dispersible granule that can be applied as a foliar spray, using ground or aerial application to control many important insects. ALTACOR® is mixed with water for application.

ALTACOR® is a member of the anthranilic diamide class of insecticides with a novel mode of action acting on insect ryanodine receptors. Although ALTACOR® has contact activity, it is most effective through ingestion of treated plant material. After exposure to ALTACOR®, affected insects will rapidly stop feeding, become paralyzed, and typically die

within 1 - 3 days. Time applications to the most susceptible insect pest stage, typically at egg hatch and/or newly hatched larvae, before populations reach damaging levels. For best results, applications must be made at or before egg deposition.

## INTEGRATED PEST MANAGEMENT

DuPont supports the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an IPM program, which 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, rotation of insecticides with different modes-of-action, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

## BENEFICIAL ARTHROPODS

ALTACOR® helps conserve certain beneficial arthropods (parasites and predators). While these beneficial arthropods cannot be relied upon to control pests, they are of potential value and can be monitored along with pests in pest management programs on these crops.

## SCOUTING

Monitor insect populations to determine whether or not there is a need for application of ALTACOR® based on locally determined economic thresholds. More than one treatment of ALTACOR® may be required to control a population of pests.

## RESISTANCE MANAGEMENT

For resistance management, ALTACOR® is a Group 28 Insecticide. Repeated and exclusive use of ALTACOR® or other Group 28 Insecticides may lead to the buildup of resistant strains of insects in some crops.

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, this product may be used as part of resistant management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

Unless directed otherwise in the specific crop/pest sections of this label, the best practices are to follow these instructions to delay the development of insecticide resistance: Make no more than 3 successive applications per generation to the same insect species on a crop. The following application(s) to the target pest in the next generation must be with an effective product with a different mode of action. If resistance to ALTACOR® develops in your area, ALTACOR® or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause,

immediately consult your local company representative or agricultural advisor for the best alternate method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.irac-online.org>.

## APPLICATION

Apply at the specified rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

Apply follow-up treatments of DuPont™ ALTACOR®, as needed, to keep pest populations within threshold limits. Refer to the Resistance Management section of this label for further guidance on follow-up treatments. See individual crop sections of this label for specific minimum spray interval.

Use sufficient water to obtain thorough, uniform coverage. Because ALTACOR® is most effective through ingestion of treated plant material, thorough spray coverage is essential for optimum control of targeted pest insects. Using increased water volumes will typically result in better spray coverage, especially under adverse conditions such as dry, hot weather or dense plant foliage. ALTACOR® may be applied by ground or aerial application equipment. For ground application use the following directions unless otherwise specified in separate crop sections of this label: use a minimum of 100 gallons per acre (gpa) of water. For aerial application use the following directions unless otherwise specified in this label: use a minimum of 10 gallons per acre (gpa) of water. For potato and cotton: for aerial application use a minimum of 5 gallons per acre (gpa) of water; for ground application use a minimum of 10 gallons per acre of water.

Use of adjuvants is only allowed on certain crops - see specific crop instructions for adjuvants in the following crop tables. In some situations where coverage is difficult to achieve such as closed canopy, dense foliage, plants with waxy leaf surfaces, or less than optimum application equipment, an adjuvant may improve performance. Use only adjuvant products that are labeled for agricultural use and follow the directions on the manufacturer's label. Always conduct a premix test for compatibility. Use a proven, EPA-approved adjuvant that does not affect foliage and/or fruit finish. Refer to specific crop sections of this label for additional adjuvant guidance.

## CROP ROTATION

Crops that are on this label and the following crop groups, Brassica (Cole) Leafy Vegetables (Crop Group 5), Cucurbit Vegetables (Crop Group 9), Fruiting Vegetables (except Cucurbits) (Crop Group 8), and Leafy Vegetables (non-Brassica) (Crop Group 4), may be planted immediately following harvest. Members of the Root and Tuber Vegetables (Crop Group 1) and the Tops of Root and Tuber Vegetables (Crop Group 2) may also be planted immediately following harvest.

The following crops or crop groups may be planted 30 days following the last application of ALTACOR®: garlic, great-headed garlic, dry bulb onion, leek, green onion, Welsh onion, shallot, Legume Vegetables (Crop Group 6), Cereal Grains (Crop Group 15), cowpea, field pea, soybean, Grass Forage, Fodder and Hay (Crop Group 17), Nongrass Animal Feeds

(Forage, Fodder, Straw, and Hay) (Crop Group 18), peanut, sugarcane, asparagus, okra, strawberry.

All other crops cannot be planted until 12 months after the last application of ALTACOR®.

## SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ALTACOR®. Fill spray tank 1/4 to 1/2 full of water. Add ALTACOR® directly to spray tank. Mix thoroughly to fully disperse the insecticide; once dispersed continued agitation is required. Use mechanical or hydraulic means; do not use air agitation. Do not store spray mix solutions overnight in spray tank. Observe the most restrictive of the labeling limitations and precautions of all products use in mixtures.

**Compatibility** - Since formulations may be changed and new ones introduced, premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.). Avoid mixtures of several materials and very concentrated spray mixtures.

This product can be mixed with pesticide products labeled for use on crops on this label in accordance with the most restrictive of label limitations and precautions. Do not exceed labeled dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

**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. ALTACOR® and other water dispersible granules.
3. Wettable powders.
4. Water based suspension concentrates
5. Water-soluble concentrates.
6. Oil based suspension concentrates.
7. Emulsifiable concentrates.
8. Adjuvants, surfactants, and oils
9. Soluble fertilizers.
10. Drift retardants.

\* Unless otherwise specified by manufacturer directions for use or by local experience.

6/10

Crops	Insects	DuPont™ ALTACOR® Rate Per Acre		Last Application Days to Harvest	REI (Hours)
		Lbs. A.I.	Ounces Product		
Grape	Grape berry moth Grape leafroller	0.044 – 0.099	2.0 – 4.5	14	4 hr.
	Climbing cutworm Omnivorous leafroller Western grapeleaf skeletonizer	0.066 – 0.099	3.0 – 4.5		
	Do not apply more than 9 oz ALTACOR® (0.2 lbs a.i.) per acre per crop per season. Make no more than 4 applications per season. The minimum interval between treatments is 7 days. Thorough spray coverage is essential for best performance. Do not apply dilute applications of more than 200 gal water per acre. Do not use an adjuvant with applications of ALTACOR®. Do not apply less than 100 gal water per acre by ground.				
Pome Fruits Including Apple; Crabapple; Loquat; Mayhaw; Pear; Pear, oriental.; Quince	East of the Rocky Mountains Green fruitworm Spotted tentiform leafminer	0.055 - 0.088	2.5 - 4.0	14	
	Apple maggot* Codling moth** Eastern apple sawfly European corn borer Obliquebanded leafroller*** Oriental fruit moth Plum curculio* Redbanded leafroller Tufted apple bud moth Varigated leafroller White apple leafhopper*	0.055 - 0.099	2.5 - 4.5		
	West of the Rocky Mountains Green fruitworm Spotted tentiform leafminer	0.055 - 0.088	2.5 - 4.0		
	Apple maggot* Codling moth** Eastern apple sawfly European corn borer Obliquebanded leafroller*** Oriental fruit moth Plum curculio* Redbanded leafroller Tufted apple bud moth Varigated leafroller White apple leafhopper*	0.066 - 0.099	3.0 - 4.5		
	Make no more than 4 applications per season. Do not apply more than 9 oz ALTACOR® (0.2 lbs a.i.) per acre per crop per season. Do not apply dilute applications of more than 200 gal water per acre. For best results apply 100 – 150 gal water per acre. The minimum interval between treatments is 10 days. Do not apply less than 100 gal water per acre by ground. Do not use an adjuvant with applications of ALTACOR® within 60 days of harvest.. <b>Spray Volume:</b> Thorough coverage is essential to achieve best results. Select a spray volume appropriate for the size of trees and density of foliage. * Suppression only. ** Codling Moth Larvae <b>Application Timing:</b> For each generation, make first application prior to egg hatch. Each application provides 10 to 17 days of protection depending on intensity of codling moth pressure and rate of fruit growth. Use pheromone trap catches, and local degree day based spray timing advisories to determine the development of each generation. <b>Apples - West of the Rocky Mountains:</b> Use the 3.0 oz/acre rate for low pressure infestations and make repeat applications on a 14 day schedule. For high pressure infestations or for orchards with a history of significant codling moth damage, apply ALTACOR® at 4.0 to 4.5 ounces per acre. Make repeat applications on a 10 to 17 day schedule. For best results in high pressure orchards, use a comprehensive management program involving ovicide treatments followed by properly timed larvacide applications at high labeled rates and shortened retreatment intervals. When using ALTACOR® in an integrated program with other codling moth insecticides, make sure the retreatment schedule is consistent with the period of effectiveness for each product used. <b>Pears - West of the rocky Mountains:</b> Apply ALTACOR® on a 14 to 17 day schedule. For low pressure infestations use the 3.0 oz rate. For high pressure infestations or for orchards with a history of significant codling moth damage, apply ALTACOR® at 4.0 to 4.5 oz/acre. ***Obliquebanded Leafroller For overwintering larvae, apply in the spring (pink to petal fall stage) at first sign of active feeding. For summer generation apply just prior to or at the beginning of egg hatch. Leafroller feeding stops after ingestion of treated foliage, however, during periods of cold weather when leafrollers are inactive, it may take several days to achieve complete control.				

7/10

Crops	Insects	DuPont™ ALTACOR® Rate Per Acre		Last Application Days to Harvest	REI (Hours)
		Lbs. A.I.	Ounces Product		
<b>Stone Fruits</b> Including Apricot; Cherry, sweet; Cherry, tart; Nectarine; Peach; Plum;  Plum, Chickasaw; Plum, Damson; Plum, Japanese; Plumcot; Prune (fresh)	Cherry fruit fly* Codling moth Katydid (nymphs) Obliquebanded leafroller Omnivorous leaf roller Oriental fruit moth Peach twig borer** Tufted apple bud moth	0.066 - 0.099	3.0 - 4.5	10	4 hr.
Make no more than 4 applications per season. Do not apply more than 9 oz ALTACOR® (0.2 lbs a.i.) per acre per crop per season. Do not apply dilute applications of more than 200 gal water per acre. For best results apply 100-150 gal water per acre. The minimum interval between treatments is 7 days. A lower application rate of 2.0 - 3.0 oz product per acre can be used in short interval spray program. Do not apply less than 100 gal water per acre by ground. For sweet cherry and tart cherry: Do not use an adjuvant with applications of ALTACOR®. * Suppression only. ** <b>Peach twig borer</b> - For dormant through delayed dormant applications: Use higher rates for dormant application and lower rates for delayed dormant. Applications may be made with an EPA registered dormant oil; for specific directions on use of oil consult manufacturer's label. For best performance, apply using ground equipment.					
<b>Cotton</b>	Beet armyworm Cotton bollworm** Fall armyworm Saltmarsh caterpillar Southern armyworm Tobacco budworm**	0.044 - 0.088	2.0 - 4.0	21	
	Cabbage looper Soybean looper*	0.066 - 0.099	3.0 - 4.5		
Do not apply more than 9 oz ALTACOR® (0.2 lbs a.i.) per acre per crop per season. The minimum interval between treatments is 5 days. Do not use an adjuvant with applications of ALTACOR®. * Suppression only. ** For Heliothine control (cotton bollworm and/or tobacco budworm) make the first application at rates of 0.066 - 0.088 lb. ai per acre ( 3.0 - 4.0 oz product). Subsequent applications can be at rates of 0.044 - 0.088 lb ai per acre (2.0 - 4.0 oz product) depending on pest pressure.					
<b>Potato</b>	Cabbage looper Colorado potato beetle European corn borer	0.044 - 0.066	2.0 - 3.0	14	
	Do not apply more than 9 oz ALTACOR® (0.2 lbs a.i.) per acre per crop per season. The minimum interval between treatments is 5 days.				

## 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 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 **Surface 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 air stream 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.

**Do not apply as a ULV application.**

### 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 APPLICATIONS DURING 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.

### TREE AND VINE SPRAYERS

Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream.

In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Movement of spray that goes beyond the edge of the cultivated area may be minimized by practices such as spraying the outside row only from outside the planting.



9/10

## SPRAY TANK CLEANOUT

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.

## STORAGE AND DISPOSAL

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

**STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Not for use or storage in or around the home.

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

**CONTAINER DISPOSAL: For Small (Capacity equal to or less than 5 Gallons) Disposable Containers:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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.

**For Large (Capacity greater than 5 Gallons or 50 Pounds) Disposable Containers:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**For All Refillable Containers:** Refillable container. Refill this container with DuPont™ ALTACOR® insecticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**NOTICE TO BUYER—** Purchase of this material does not confer any rights under patents of countries outside of the United States.

The DuPont Oval Logo, DuPont™, ALTACOR® and RYNAXYPYR® are trademarks or registered trademarks of E.I. duPont de Nemours and Company.

**D - 1161 042408**

## 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.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, DUPONT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL DUPONT OR SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BUYER'S OR USER'S BARGAINED-FOR EXPECTATION IS CROP PROTECTION. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF DUPONT OR SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, TORT OR STRICT LIABILITY), WHETHER FROM FAILURE TO PERFORM OR INJURY TO CROPS OR OTHER PLANTS, AND RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT, OR AT THE ELECTION OF DUPONT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

To the extent consistent with applicable law that allows such requirement, DuPont or its Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify DuPont or a DuPont Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

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

Internet address: [www.cropprotection.dupont.com](http://www.cropprotection.dupont.com)

© 2008 E. I. du Pont de Nemours and Company, 1007 Market Street, Wilmington, DE 19898

All rights reserved.