

352-597

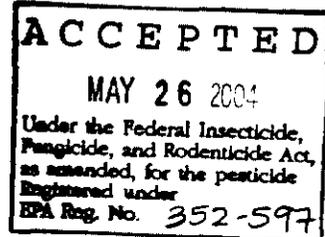
5/26/2004

118



# DuPont™ Avaunt®

## insecticide



### Dispersible Granules

| Active Ingredient  | By Weight   |
|--|-------------|
| Indoxacarb<br>(S)-methyl 7-chloro-2,5-dihydro-2-[[[(methoxy-carbonyl)[4(trifluoromethoxy)phenyl]amino]-carbonyl]indeno[1,2-c][1,3,4]oxadiazine-4a-(3H)-carboxylate | 30%         |
| Inert Ingredients  | 70%         |
| <b>TOTAL</b>   | <b>100%</b> |

EPA Reg. No. 352-597

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

Establishment Nos.: 33972-FR-1, 67545AZ-1

### PRECAUTIONARY STATEMENTS

#### KEEP OUT OF REACH OF CHILDREN

## CAUTION

#### 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

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

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-441-3637 for emergency medical treatment information.

### PRECAUTIONARY STATEMENTS (cont'd)

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution!** Harmful if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing (dust, vapor or spray mist). Remove contaminated clothing and wash clothing before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical resistant to this product are listed below. If you want more options follow the instructions for Category A on the EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:**

Long-sleeved shirt and long pants.

Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber), all ≥14 mls.

Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, 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 mammals, birds, fish and aquatic invertebrates. Do not apply directly to water, 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 rinsewater. Do not apply where/when conditions could favor runoff. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Cover, incorporate, or clean up granules that are spilled.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

2/8

## 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.

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, wear:

- Coveralls over long sleeved shirt and long pants,
- Socks plus chemical resistant footwear,
- Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber), all  $\geq 14$  mils.

DuPont™ AVAUNT® should be used only in accordance with recommendations on this label or in separate DuPont supplemental labeling available through local dealers.

DuPont will not be responsible for losses or damages resulting from use of this product in any manner not specifically recommended by DuPont. User assumes all risks associated with such non-recommended use.

## GENERAL INFORMATION

AVAUNT® is a water dispersible granule that can be applied as a foliar spray to control many important insects.

AVAUNT® is mixed with water for application.

Use only in commercial and farm plantings. Not for use in home plantings. Not for use during any period after a commercial crop site is opened for public entry as a "U-Pick", "Pick Your Own" or similar operation; in no case shall preharvest applications be made after first public entry. The restricted entry interval(s) stated elsewhere on this label must be followed.

Not for use or sale in Suffolk and Nassau Counties, Long Island, New York.

Do not formulate this product into any other End-use products without written permission of DuPont.

Do not apply this product through any type of irrigation system except for sprinkler irrigation uses allowed by Special Local Need (SLN) registrations.

## 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

AVAUNT® helps conserve certain beneficials (parasites and predators). While these beneficials 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 AVAUNT® based on locally determined economic thresholds. More than one treatment of AVAUNT® may be required to control a population of pests.

## RESISTANCE

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 agricultural authorities for details.

## APPLICATION

Apply at the recommended 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.

Follow-up treatments of AVAUNT® should be applied, as needed, to keep pest populations within threshold limits. On most crops, AVAUNT® should be applied at 5 to 7 day intervals to maintain control. On apple and pear the minimum interval between treatments is 7 days.

Use sufficient water to obtain thorough, uniform coverage.

AVAUNT® may be applied by ground or aerial application equipment. For aerial application use the following directions unless otherwise specified in this label: use a minimum of 5 gallons per acre (gpa) of water, except in tree and orchard crops use a minimum of 10 gpa.

Use of Adjuvants: 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.

318

| Crops  | Insects                                       | DuPont™ AVAUNT® Rate Per Acre |            | Last Application Days to Harvest | REI     |
|--|---|-------------------------------|------------|----------------------------------|---------|
|  |   | Lbs. A.I.                     | Ounces     |                                  |         |
| Apple  | Codling moth - East of the Rocky Mountains    | 0.09 - 0.11                   | 5.0 - 6.0  | 14                               | 12 hrs. |
|  | Codling moth - West of the Rocky Mountains*   | 0.09 - 0.11                   | 5.0 - 6.0  |                                  |         |
|  | European apple sawfly (except California)     | 0.09 - 0.11                   | 5.0 - 6.0  |                                  |         |
|  | Green fruitworm (except California)           |                               |            |                                  |         |
|  | Lesser appleworm                              |                               |            |                                  |         |
|  | Oriental fruit moth                           |                               |            |                                  |         |
| Pandemis leafroller  |   |                               |            |                                  |         |
| Plum curculio  | 0.056 - 0.11                                  | 3.0 - 6.0                     |            |                                  |         |
| Potato leafhopper  |   |                               |            |                                  |         |
| Redbanded leafroller   |   |                               |            |                                  |         |
| Spotted tentiform leafminer - suppression only** (except California)   |   |                               |            |                                  |         |
| Tarnished plant bug  |   |                               |            |                                  |         |
| Tufted apple bud moth  | 0.11  | 6.0                           |            |                                  |         |
| White apple leafhopper***  |   |                               |            |                                  |         |
| Lacanobia fruitworm (except California)  |   |                               |            |                                  |         |
| Apple maggot****   |   |                               |            |                                  |         |
| <p>Make no more than 3 applications prior to hand-thinning. No hand-thinning after the 4th application.</p> <p>Make no more than 4 applications per season. Do not apply more than 24 oz. AVAUNT® (0.44 lbs a.i.) per acre per crop. Do not apply dilute applications of more than 200 gal water per acre. For best results apply 50 - 150 gal water per acre. The minimum interval between treatments is 7 days.</p> <p>*West of the Rockies. For use against low to moderate infestations in conjunction with alternate control measures such as established Mating Disruption blocks.</p> <p>**Use of an adjuvant may improve performance.</p> <p>For best results, especially when using the lower use rate, use an adjuvant.</p> <p>***White apple leafhopper (OR and WA only)-application rates of 2.5 - 4.9 ounces per acre (0.045 - 0.089 lbs. A.I./acre) may be used for suppression of light infestations.</p> <p>****Apple maggot - apple maggot entering the orchard from border areas may not be controlled if they do not feed on treated apples prior to oviposition.</p> |   |                               |            |                                  |         |
| Broccoli   | Beet Armyworm                                 | 0.065*                        | 3.5*       | 3                                | 12 hrs. |
|  | Diamondback moth                              |                               |            |                                  |         |
|  | Cabbage looper                                | 0.045 - 0.065*                | 2.5 - 3.5* |                                  |         |
|  | Cabbage webworm (except California)           |                               |            |                                  |         |
|  | Cross striped cabbageworm (except California) |                               |            |                                  |         |
|  | Imported cabbageworm                          |                               |            |                                  |         |
| <p>Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop. The minimum interval between sprays is 3 days.</p> <p>*Add a wetting agent to improve spray coverage.</p>   |   |                               |            |                                  |         |
| Brussels Sprouts   | Beet Armyworm                                 | 0.065*                        | 3.5*       | 3                                | 12 hrs. |
|  | Diamondback moth                              |                               |            |                                  |         |
|  | Cabbage looper                                | 0.045 - 0.065*                | 2.5 - 3.5* |                                  |         |
|  | Cabbage webworm (except California)           |                               |            |                                  |         |
|  | Cross striped cabbageworm (except California) |                               |            |                                  |         |
|  | Imported cabbageworm                          |                               |            |                                  |         |
| <p>Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop. The minimum interval between sprays is 3 days.</p> <p>*Add a wetting agent to improve spray coverage.</p>   |   |                               |            |                                  |         |
| Cabbage (tight headed varieties only)  | Beet Armyworm                                 | 0.065*                        | 3.5*       | 3                                | 12 hrs. |
|  | Diamondback moth                              |                               |            |                                  |         |
|  | Cabbage looper                                | 0.045 - 0.065*                | 2.5 - 3.5* |                                  |         |
|  | Cabbage webworm (except California)           |                               |            |                                  |         |
|  | Cross striped cabbageworm (except California) |                               |            |                                  |         |
|  | Imported cabbageworm                          |                               |            |                                  |         |
| <p>Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop. The minimum interval between sprays is 3 days.</p> <p>*Add a wetting agent to improve spray coverage.</p>   |   |                               |            |                                  |         |

418

| Crops                      | Insects   | DuPont™ AVAUNT® Rate Per Acre |            | Last Application<br>Days to Harvest | REI                            |
|----------------------------|---|-------------------------------|------------|-------------------------------------|--------------------------------|
|                            |   | Lbs. A.I.                     | Ounces     |                                     |                                |
| Cauliflower                | Beet Armyworm<br>Diamondback moth   | 0.065*                        | 3.5*       | 3                                   | 12 hrs.                        |
|                            | Cabbage looper<br>Cabbage webworm<br>(except California)<br>Cross striped cabbageworm<br>(except California)<br>Imported cabbageworm  | 0.045 - 0.065*                | 2.5 - 3.5* |                                     |                                |
|                            | Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop.<br>The minimum interval between sprays is 3 days.<br>*Add a wetting agent to improve spray coverage.  |                               |            |                                     |                                |
| Chinese Broccoli           | Beet Armyworm<br>Diamondback moth   | 0.065*                        | 3.5*       | 3                                   | 12 hrs.                        |
|                            | Cabbage looper<br>Cabbage webworm<br>(except California)<br>Cross striped cabbageworm<br>(except California)<br>Imported cabbageworm  | 0.045 - 0.065*                | 2.5 - 3.5* |                                     |                                |
|                            | Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop.<br>The minimum interval between sprays is 3 days.<br>*Add a wetting agent to improve spray coverage.  |                               |            |                                     |                                |
| Chinese Cabbage<br>(napa)  | Beet Armyworm<br>Diamondback moth   | 0.065*                        | 3.5*       | 3                                   | 12 hrs.                        |
|                            | Cabbage looper<br>Cabbage webworm<br>(except California)<br>Cross striped cabbageworm<br>(except California)<br>Imported cabbageworm  | 0.045 - 0.065*                | 2.5 - 3.5* |                                     |                                |
|                            | Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop.<br>The minimum interval between sprays is 3 days.<br>*Add a wetting agent to improve spray coverage.  |                               |            |                                     |                                |
| Chinese Mustard<br>Cabbage | Beet Armyworm<br>Diamondback moth   | 0.065*                        | 3.5*       | 3                                   | 12 hrs.                        |
|                            | Cabbage looper<br>Cabbage webworm<br>(except California)<br>Cross striped cabbageworm<br>(except California)<br>Imported cabbageworm  | 0.045 - 0.065*                | 2.5 - 3.5* |                                     |                                |
|                            | Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop.<br>The minimum interval between sprays is 3 days.<br>*Add a wetting agent to improve spray coverage.  |                               |            |                                     |                                |
| Corn (sweet)               | European corn borer<br>(except California)<br>Fall armyworm   | 0.045 - 0.065                 | 2.5 - 3.5  | 3<br>35 - fodder<br>& stover        | 12 hrs.                        |
|                            | Make no more than 4 applications per season.<br>Whorl stage through tassel emergence (prior to silking) application only. Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop.<br>The minimum interval between sprays is 3 days. |                               |            |                                     | 14 days for hand<br>harvesting |
| Eggplant                   | Beet armyworm<br>Southern armyworm<br>Tomato fruitworm<br>Tomato pinworm<br>(except California)   | 0.065                         | 3.5        | 3                                   | 12 hrs.                        |
|                            | Loopers   | 0.045 - 0.065                 | 2.5 - 3.5  |                                     |                                |
|                            | Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop.<br>The minimum interval between sprays is 5 days.   |                               |            |                                     |                                |
| Kohlrabi                   | Beet Armyworm<br>Diamondback moth   | 0.065*                        | 3.5*       | 3                                   | 12 hrs.                        |
|                            | Cabbage looper<br>Cabbage webworm<br>(except California)<br>Cross striped cabbageworm<br>(except California)<br>Imported cabbageworm  | 0.045 - 0.065*                | 2.5 - 3.5* |                                     |                                |
|                            | Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop.<br>The minimum interval between sprays is 3 days.<br>*Add a wetting agent to improve spray coverage.  |                               |            |                                     |                                |

| Crops  | Insects   | DuPont™ AVAUNT® Rate Per Acre |           | Last Application<br>Days to Harvest | REI     |
|--|---|-------------------------------|-----------|-------------------------------------|---------|
|  |   | Lbs. A.I.                     | Ounces    |                                     |         |
| Lettuce (Head and Leaf varieties)  | Beet armyworm   | 0.065 - 0.11                  | 3.5 - 6.0 | 3                                   | 12 hrs. |
|  | Corn earworm  |                               |           |                                     |         |
|  | Cabbage looper  | 0.045 - 0.065                 | 2.5 - 3.5 |                                     |         |
| Do not apply more than 24 ounces AVAUNT® (0.44 lbs a.i.) per acre per crop. The minimum interval between sprays is 3 days.   |   |                               |           |                                     |         |
| Pear   | Codling moth - East of the Rocky Mountains  | 0.09 - 0.11                   | 5.0 - 6.0 | 28                                  | 12 hrs. |
|  | Codling moth - West of the Rocky Mountains*   |                               |           |                                     |         |
|  | Oriental fruit moth   | 0.09 - 0.11                   | 5.0 - 6.0 |                                     |         |
|  | Pandemis leafroller (except California)<br>Redbanded leafroller<br>White apple leafhopper (except California)                             |                               |           |                                     |         |
| Make no more than 3 applications prior to hand-thinning. No hand-thinning after the 4th application. Make no more than 4 applications per season. Do not apply more than 24 oz AVAUNT® (0.44 lbs a.i.) per acre per crop. Do not apply dilute applications of more than 200 gal water per acre. For best results apply 50 - 150 gal water per acre. The minimum interval between treatments is 7 days.<br>*West of the Rockies. For use against low to moderate infestations in conjunction with alternate control measures such as established Mating Disruption blocks.  |   |                               |           |                                     |         |
| Pepper (Bell and Non-Bell)   | Beet armyworm   | 0.065                         | 3.5       | 3                                   | 12 hrs. |
|  | Southern armyworm   |                               |           |                                     |         |
|  | Tomato fruitworm  |                               |           |                                     |         |
|  | Loopers   | 0.045 - 0.065                 | 2.5 - 3.5 |                                     |         |
| Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop. The minimum interval between sprays is 5 days.   |   |                               |           |                                     |         |
| Potato   | Cabbage looper  | 0.045 - 0.11                  | 2.5 - 6.0 | 7                                   | 12 hrs. |
|  | Colorado potato beetle*   |                               |           |                                     |         |
|  | European corn borer (except California)   | 0.065 - 0.11                  | 3.5 - 6.0 |                                     |         |
| Do not apply more than 24 ounces AVAUNT® (0.44 lbs a.i.) per acre per crop. The minimum interval between sprays is 5 days.<br>*Colorado potato beetle - In situations where Colorado potato beetle populations are known or suspected to be difficult to control with current insect control products, the inclusion of piperonyl butoxide (PBO), a synergist, with AVAUNT® may be necessary to achieve optimum control. In these situations, a combination of AVAUNT® applied at a rate of 3.5 - 6.0 oz. per acre combined with 0.25 lb a.i. per acre of PBO may be necessary to achieve the most effective control of Colorado potato beetle larvae.<br>Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use the highest recommended rate for controlling severe infestations. Apply AVAUNT® insecticide as a thorough coverage spray using properly calibrated air or ground spray equipment. Use sufficient water to obtain thorough and uniform coverage. For aerial application, use a minimum of 5 gallons of water per acre. |   |                               |           |                                     |         |
| Tomato   | Beet armyworm   | 0.065                         | 3.5       | 3                                   | 12 hrs. |
|  | Leafminer (Florida only - suppression only)*<br>Southern armyworm<br>Tomato fruitworm<br>Tomato pinworm<br>Western yellowstriped armyworm |                               |           |                                     |         |
|  | Hornworms   | 0.045 - 0.065                 | 2.5 - 3.5 |                                     |         |
|  | Loopers   |                               |           |                                     |         |
| Do not apply more than 14 ounces AVAUNT® (0.26 lbs a.i.) per acre per crop. The minimum interval between sprays is 5 days.<br>*Use of an adjuvant may improve performance.   |   |                               |           |                                     |         |

6/8

## SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying DuPont™ AVAUNT®. Fill spray tank 1/4 to 1/2 full of water. Add AVAUNT® 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. Spray mix should not be stored overnight in spray tank.

**Compatibility** - Since formulations may be changed and new ones introduced, it is recommended that users 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. No label dosage rates should be exceeded. 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 bags.
2. AVAUNT® 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, oils.
9. Soluble fertilizers.
10. Drift retardants.

## 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 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.
- 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 effect 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.

**AIR ASSISTED (AIR BLAST) TREE AND VINE SPRAYERS**

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

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.*

**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.

**CROP ROTATION RESTRICTIONS**

Crops that are on this label and alfalfa, cotton, peanuts and soybeans may be planted immediately following harvest. Do not plant for food or feed any other crops not registered for use with indoxacarb for 30 days after last use.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** 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. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL: For Plastic Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **For Fiber Drums With Liners:** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

**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™ and AVAUNT® are trademarks or registered trademarks of E. I. duPont de Nemours and Company.

**D - 952 052404**

8/8

**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.

DuPont does not agree to be an insurer of these risks. **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.

DUPONT MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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. 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.

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: <http://cropprotection.dupont.com/>

© 2000-2004 E. I. du Pont de Nemours and Company, Wilmington, Delaware 19898.  
 All rights reserved.