

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

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

PA Keg. Number:	Date of	ISSURDC
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DEC - 8 2005

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#### NOTICE OF PESTICIDE:

X Registration
Reregistration

(under FIFRA, as amended)

Term of Issuance:	
Conditional	

352-665

Name of Pesticide Product:

DuPont Velpar Alfa Max Herbicide

Name and Address of Registrant (include ZIP Code):

E.I. DuPont de Nemours and Company DuPont Crop Protection Stine-Haskell Research Center 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/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 the results of the one-year storage stability (830.6317) and corrosion characteristics (830.6320) studies when they are available.
- 2. 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.
- 3. Make the labeling changes listed below before you release the product for shipment:

Signature of Approving Official:

Vickie Ku'allas for

James A. Tompkins, Product Manager (25) Herbicide Branch, Registration Division (7505C) Date

12/8/05

Page 2 EPA Reg. No. 352-665

- a. Add the phrase "EPA Registration No. 352-665"
- b. In the Limitation of Warranty and Liability, revise the second sentence of the third paragraph to read "To the extent permitted by law, when you buy or use this product, you agree to accept these risks.
- 4. Submit one (1) copy of your final printed label 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.

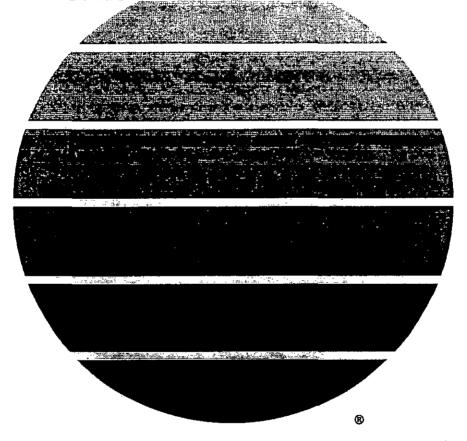
Enclosure



# DuPont<sup>™</sup> Velpar<sup>®</sup> AlfaMax<sup>™</sup>

herbicide

# **DRAFT LABEL**



"........ A Growing Partnership With Nature"

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# **DuPont™ Velpar® AlfaMax™**

#### herbicide

#### Dispersible Granules

Active Ingredient	By Weight
Hexazinone	
[3-cyclohexyl-6-(dimethylamino)	
-1-methyl-1.3.5-triazine-2,4(1H,3H)-dione]	35.3
Diuron	
3-[3,4-dichlorophenyl]-1,1-dimethylurea	42.4
Inert Ingredients	22.3

**TOTAL** 

ACCEPTED 100% with COMMENTS In EPA Letter Dated:

EPA Reg. No. 352-XXX

DEC - 8 2005

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 352-645

# DANGER PELIGRO

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 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: 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.

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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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 medical emergencies involving this product.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER! CAUSES EYE DAMAGE.

Corrosive, causes irreversible eye damage. May irritate nose, throat and skin. Avoid breathing dust or spray mist. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin. Wash thoroughly with soap and water after handling.

#### PERSONAL PROTECTIVE EQUIPMENT

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category selection chart.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes plus socks.
- Protective eyewear.
- Dust mist respirator.
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride.

#### Mixers and loaders must also wear:

Apron

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### ENGINEERING CONTROL STATEMENT

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.

#### **ENVIRONMENTAL HAZARDS**

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

The active ingredient, hexazinone, in this product is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

#### GENERAL INFORMATION

DuPont<sup>™</sup> VELPAR® ALFAMAX<sup>™</sup> herbicide is a waterdispersible granule that is mixed in water and applied as a spray for weed control in alfalfa.

VELPAR® ALFAMAX<sup>TM</sup> is an effective general herbicide providing both contact and residual control of many annual and biennial weeds.

VELPAR® ALFAMAXTM is noncorrosive to equipment.

Care should be exercised when applying VELPAR® ALFAMAX<sup>TM</sup> near desirable trees or shrubs as they can absorb VELPAR® ALFAMAX<sup>TM</sup> through roots extending into treated areas.

### ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

VELPAR® ALFAMAX<sup>TM</sup> is absorbed through the roots and foliage. Moisture is required to activate VELPAR® ALFAMAX<sup>TM</sup> in the soil. Best results are obtained when the soil is moist at the time of application and 1/2-1 inch of rainfall occurs within 2 weeks after application.

For best results, apply VELPAR® ALFAMAX<sup>TM</sup> preemergence or postemergence when weeds are less than 2 inches in height or diameter. Herbicidal activity is most effective under conditions of high temperature (above 80 °F), high humidity, and good soil moisture. Herbicidal activity may be reduced when vegetation is dormant, semi-dormant, or under stress(e.g. temperature or moisture).

Herbicidal activity will usually appear within 2 weeks after application to susceptible plants under warm, humid conditions: while 4–6 weeks may be required when weather is cool or dry, or when susceptible plants are under stress. If rainfall after application is inadequate to activate VELPAR® ALFAMAX<sup>TM</sup> in the soil, plants may recover from contact effects and continue to grow.

The degree and duration of control will depend on the following:

- · Use rate
- · Weed spectrum and size at time of application
- · Environmental conditions at and following treatment

Where a rate range is shown, use the higher levels of the dosage range on hard-to-control species, fine-textured soils, or soils containing greater than 5% organic matter or carbon. Refer to the USE RATES table for rate ranges.

#### APPLICATION INFORMATION

VELPAR® ALFAMAX<sup>TM</sup> may be applied by ground equipment and, where permitted, aerial equipment. Use rates, minimum spray gallonage, and other application information are described for various uses.

#### MIXING

Before spraying, calibrate equipment to determine the quantity of water necessary to uniformly and thoroughly cover the vegetation and soil in a measured area to be treated. Make sure the volume of water is sufficient to completely suspend the VELPAR® ALFAMAX<sup>TM</sup>.

#### RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide recommendations available in your area.

#### 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 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 systems in your area.

#### **DIRECTIONS FOR USE**

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

VELPAR® ALFAMAX<sup>TM</sup> should be used only in accordance with recommendations on this label, or in supplemental DuPont 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.

The correct use rates by crop and geographical area, specified on the label, and proper mixing/loading site considerations and application procedures must be followed to minimize potential for hexazinone movement into ground water. Users are encouraged to consult with their state Department of Agriculture. Extension Service, or other pesticide lead agency for information regarding soil permeability, aquifer vulnerability, and best management practices for their area.

#### **AGRICULTURAL USES**

#### 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 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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 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.

Chemical-resistant gloves made of any waterproof material.

Shoes plus socks.

Protective eyewear.

#### **ALFALFA**

DuPont<sup>TM</sup> VELPAR® ALFAMAX<sup>TM</sup> is recommended for control of certain weeds in established alfalfa grown for hay. Make only a single application to alfalfa grown for seed or hay. Do not use on alfalfa grown for seed in any state except California.

#### APPLICATION TIMING

#### NON-DORMANT AND SEMI-DORMANT VARIETIES

In the following states, make a single application during winter months when alfalfa plants are in the least active stage of growth:

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Arizona	Montana	Oklahoma	Washington
California	Nebraska	Oregon	Wyoming
Colorado	Nevada	South Dakota	
Idaho	New Mexico	Texas	
Kansas	North Dakota	Utah	

In the following states, make a single application in the spring before new growth begins:

Connecticut	Maine	New Hampshire	Vermont
Delaware	Maryland	New Jersey	Virginia
Illinois	Massachusetts	New York	West Virginia
Indiana	Michigan	Ohio	Wisconsin
Iowa	Minnesota	Pennsylvania	
Kentucky	Missouri	Rhode Island	

**NOTE**: Severe alfalfa injury may result following application after cutting if either the regrowth is more than 2 inches high, significant stubble is left after alfalfa cutting, or the air temperature is above 90 °F.

#### DORMANT VARIETIES

Make a single application after alfalfa becomes dormant and before new growth begins in the spring. Where weeds have emerged, use a surfactant.

#### **USE RATES**

Use higher rates on hard-to-control species, fine textured soils, soils containing greater than 5% organic matter, or under adverse environmental conditions such as temperature extremes or when weeds are stressed due to low rainfall.

Select the appropriate dose for soil texture and organic matter content as follows:

VELPAR® ALFAMAX™
(Pounds per Acre)
Percent Organic Matter in Soil

Soils	1-5%	>5%	
Coarse Texture			
Loamy sand, sandy loam	1.5 - 2	3 - 4.3	
Medium Texture			
Loam, silt loam, silt, clay loam, sandy clay loam	2 - 4.3	3 - 4,3	
FineTexture			
Silty clay loam, sandy clay, silty clay, clay	2 - 4.3	3 - 4.3	

#### WEEDS CONTROLLED

VELPAR® ALFAMAX<sup>TM</sup>, when applied preemergence or early postemergence at the following rates is recommended for the control or suppression of the following species:

0.75 - 1 Pound per Acre	
Tansymustard (pinnate)	Descurainia pinnata

#### 1.5 - 3 Pounds per Acre

Barnyardgrass Bluegrass, annual Catchily, English Cheatgrass (downy brome) Chickweed, common Cocklebur\* Corn spurry Crabgrass Dogfennel (mayweed) Fiddleneck (tarweed) Filaree, redstem Flixweed Groundsel, common Lambsquarter, common Lettuce, miners Mustard, blue Mustard, Jim Hill Orchardgrass (seedling) Pennycress, field Pigweed Prickly sida\* Purslane, common Radish, wild Ragweed, common Rocket, London Rocket, vellow (wintercress) Salsify Sesbania, hemp\*

Echinochloa crus-galli Poa annua Silene gallica Bromus tectorum Stellaria media Xanthium strumarium Spergula arvensis Digitaris sp. Anthemis cotula Amsinckia lycopsoides Erodium cicutarium Descurainin sophia Senecio vulgaris Chenopodium album Montia perfoliata Chorispora tenella Sisymbrium altissimum Dactylis glomerata Thlaspi arvense Amaranthus sp. Sida spinosa Portulaca oleracea Raphanus raphanistrum Ambrosia elatior Sisymbrium irio Barbarea orthoceras

\* Suppression

Shepherdspurse

Sicklepod\*

#### 3 - 4.3 Pounds per Acre

Alfalfa (seedling)\* Bluegrass, perennial\* (spring only) Buckwheat, wild Cockle, white\* Dandelion, common\* Dandelion, false Fescue, rattail Foxtail\* Gromwell, com Groundcherry (annual) Knawel, annual Lettuce, prickly (wild) Mexicantea\* Morningglory (annual) Mustard, wild Quackgrass\* Ryegrass, annual Sprangletop, red Velvetgrass (seedling)

Medicago sativa

Cassia obtusifolia

Tragopogon sp. Sesbania exaltata

Capsella bursa-pastoris

Poa compressa Polygonum convolvulus Silene alba Tarazacum officinale Hypochaeris radicata Vulpia myuros Setaria sp. Lithospermum arvense Physalis sp. Scleranthus annuus Lactuca serriola Chenopodium ambrosioides Ipomoea sp. Brassica kaber Elvtrigia repens Lolium multiflorum Leptochloa filifromis Holcus lanatus Anthoxanthum odoratum

\* Suppression

Vernalgrass, sweet (seedling)

Suppression is a visible reduction in plant population and/or plant vigor as compared to an untreated area and generally is not accepted as control.

#### **SPRAY EQUIPMENT**

Apply VELPAR® ALFAMAX<sup>TM</sup> using a fixed boom power sprayer or aerial equipment.

Add VELPAR® ALFAMAX<sup>TM</sup> to a water-filled tank and mix thoroughly. Apply in at least 20 gallons of water per acre by ground or 5 to 10 gallons of water per acre by air.

#### TANK MIXTURES

VELPAR® ALFAMAX<sup>TM</sup> may be tank mixed with other suitable herbicides registered for use in alfalfa. Refer to the tank mixture partner label(s) for any additional use information, precautions or restrictions. Follow the label guidelines that are the most restrictive. VELPAR® ALFAMAX<sup>TM</sup> may also be tank mixed with appropriate adjuvants used with herbicides in alfalfa.

When using VELPAR® ALFAMAX<sup>TM</sup> alone or in combination, thoroughly mix the spray tank contents by agitation if allowed to settle.

NOTE: If there is no prior use experience with the tank mixture combination, a compatibility test should be performed prior to adding the products into the spray tank.

#### Mixing with other herbicides

Determine the tank mixture partner(s) compatibility with VELPAR® ALFAMAX<sup>TM</sup> by following the directions below.

- 1. Put 1 pint of water in a quart jar.
- 2. Mix 2 teaspoons of VELPAR® ALFAMAX<sup>TM</sup> with 2 tablespoons of water; mix thoroughly and add to the jar.
- 3. Close jar securely and shake well.
- 4. For other herbicides used in the mixture, premix 2 teaspoons of dry material or 1 teaspoon of liquid with 2 tablespoons of water and add to the jar of VELPAR® ALFAMAX<sup>TM</sup> solution.
- 5. Close jar securely and shake well.
- Watch mixture for several seconds: check again in 30 minutes.
- 7. If mixture does not separate, foam excessively, gel or become lumpy, it may be used.

#### REPLANTING

- Do not replant treated areas to any crop except corn, root crops or sugarcane within two years after treatment, as crop injury may result.
- Corn may be planted 12 months after the last treatment in areas of moderate to high rainfall (greater than 20 inches), as long as the use rate does not exceed 2.1 pounds of product per acre.
- Root crops such as potatoes, sugarbeets, radish and carrots
  may be planted 12 months after last treatment, provided the
  use rate is less than or equal to 1.4 pounds of product per
  acre. Sites with use rates greater than 1.4 pounds of
  product per acre should not be replanted to any crop within
  2 years of application, or unacceptable crop injury may
  result.

In areas where irrigation is needed to produce the crop, the crop rotation intervals listed may need to be extended if the normal irrigation amount is reduced for any reason.

- · Sugarcane may be planted any time following treatment.
- In California, do not replant seed alfalfa areas to any crop within two years after treatment, as crop injury may result.

#### Flood Irrigated Alfalfa

In arid climates (10 inches of rainfall or less per year) or areas where drought conditions have prevailed for one or more years, a field bioassay should be completed prior to planting any desired crop. The results of this bioassay may require the rotation intervals listed above to be extended.

A successful bioassay means growing to maturity a test strip of the crop(s) intended for production. The test crop(s) strip should cross the entire field including knolls, low areas, and areas where any berns were located.

#### **USE PRECAUTIONS**

Best results are obtained when 1/2-1 inch of rainfall or sprinkler irrigation occurs within two weeks after application, when soil is moist at time of application, and when weeds have not germinated or are less than 2 inches in height or diameter. Heavy rainfall or excessive irrigation after application may result in crop injury or poor performance of the herbicide.

- On soils high in organic matter (greater than 5%), the effectiveness of DuPont™ VELPAR® ALFAMAX™ can be significantly reduced and weed control may be unsatisfactory.
- Crop injury, including mortality, may result in fields with restricted root growth due to non-uniform soil profiles such as gravel bases and clay lenses.
- Crop injury may result if hot weather, mid-to-high 90 degree range or higher, occurs within a few days after application.
- In the PNW region, treat only stands that have a well
  developed tap root structure that is at least 10 inches in
  length throughout the field and the crop is healthy,
  vigorous, and not under stress from weather conditions,
  low fertility, insects or disease damage.
- In areas with short growing seasons, such as, higher elevations, adequate alfalfa tap root growth (10-12 inches in length, 0.25 inch diameter below crown) may not occur when alfalfa is grown together with a cover or nurse crop. If an adequate tap root is not present, delay application of VELPAR® ALFAMAX<sup>TM</sup> until the alfalfa has gone through a minimum of two growing seasons.
- Treat only stands of alfalfa established for one year or for one growing season (except in California), provided the following conditions are met:
  - alfalfa root growth exceeds 6 inches in length.
  - vegetative top growth of alfalfa has lateral development of secondary growth.
  - alfalfa is healthy and vigorous, not growing under stress from insect, disease, winter injury or other types of stress,

Injury may result to alfalfa plants that fail to meet these growth criterion listed above.

• Do not apply to snow-covered or frozen ground.

- Since the effect of VELPAR® ALFAMAX<sup>TM</sup> on alfalfa varies with soil conditions, uniformity of application, and environmental conditions, growers should limit their first use to small areas.
- If abnormally dry conditions exist following application.
   restrict the first irrigation to no more than 1/2 acre inch of water.
- Temporary yellowing of alfalfa may occur following VELPAR® ALFAMAX<sup>TM</sup> applications.
- Treat only stands established for 1 year or more. Do not apply to alfalfa under stress from disease, insect damage, shallow root penetration (such as on shallow hard pans), alkalai spots, nor to flooded fields as crop injury may result.
- Do not use VELPAR® ALFAMAX™ on seedling alfalfa.
   alfalfa-grass mixtures, or other mixed stands as injury may result to the seedling alfalfa or companion crop.
- Do not use VELPAR® ALFAMAX<sup>TM</sup> in low desert valleys in California or Arizona.
- Do not add a surfactant to VELPAR® ALFAMAX<sup>TM</sup> when treating nondormant alfalfa.
- Do not use VELPAR® ALFAMAX<sup>TM</sup> on gravelly or rocky soils, exposed subsoils, hardpan, sand, poorly drained soil, or alkali soils.
- Do not graze or feed forage or hay to livestock within 30 days following application.

## SEED ALFALFA (CALIFORNIA ONLY) - ADDITIONAL USE PRECAUTIONS

- Do not use VELPAR® ALFAMAX<sup>TM</sup> on fields that have less than 1% organic matter.
- Do not apply more than 1.4 pounds of product per acre on fields with sandy loam or loamy sand soils having 1-2% organic matter.
- Do not apply more than 1.4 pounds of product per acre on seed alfalfa that has been established for only one growing

### ADDITIONAL USE INFORMATION 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 (greater than 150–200 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions! See the Wind: Temperature and Humidity; and Temperature Inversions sections below.

## CONTROLLING DROPLET SIZE - GENERAL TECHNIQUES

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use a higher-capacity nozzle instead of increasing pressure.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets, Consider using low-drift nozzles.

#### **CONTROLLING DROPLET SIZE - AIRCRAFT**

- Number of Nozzles Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- Nozzle Type Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.

#### **BOOM LENGTH AND HEIGHT**

- Boom Length (aircraft) The boom length should not exceed 3/4 of the wing length, using shorter booms decreases drift potential. For helicopters use a boom length and position that prevents droplets from entering the rotor vortices.
- Boom Height (aircraft) Application more than 10 feet above the canopy increases the potential for spray drift.
- Boom Height (ground) Setting the boom at the lowest labeled height (if specified) which provides uniform coverage reduces the exposure of droplets to evaporation and wind.
   The boom should remain level with the crop and have minimal bounce.

#### WIND

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

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

#### **TEMPERATURE AND HUMIDITY**

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

#### SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground

fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates a surface inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### SHIELDED SPRAYERS

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

#### SPRAY TANK CLEAN OUT

Thoroughly clean all traces of DuPont<sup>TM</sup> VELPAR® ALFAMAX<sup>TM</sup> from application equipment immediately after use. Flush the tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately). Dispose of the equipment wash water by applying it to a use site listed on this label.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store product in original container only. Store in a cool, dry place.

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

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 Sacks: Completely empty fiber sack by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into manufacturing or application equipment. Then dispose of sack in a sanitary landfill or by incineration if allowed by State and local authorities. 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. For Paper and Plastic Bags: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke,

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

The DuPont Oval, DuPont<sup>TM</sup> and VELPAR® ALFAMAX<sup>TM</sup> are trademarks or registered trademarks of E. I. duPont de Nemours and Company

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#### LIMITATION OF

#### WARRANTY AND LIABILITY

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