

352-665

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

JAN 16 2008

Mr. J. H. Cain  
E.I. DuPont de Nemours & Company  
DuPont Crop Protection  
Stine-Haskell Research Center  
P.O. Box 30  
Newark, DE 19714-0030

Dear Mr. Cain:

Subject: DuPont Velpar AlfaMax Herbicide (Revise REI)  
EPA Registration No. 352-665  
Application Dated October 19, 2007

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable provided you make the following change before you release the product for shipment.

--Under Personal Protective Equipment (PPE), revise your respirator statement to read "A NIOSH approved half mask respirator equipped with N, R, P, or HE particulate air filters and has the approval prefix (84A-XXXX).—

Submit one copy of your final printed label incorporating this change before you release the product for shipment. Amended labeling supersedes all previously approved ones. A stamped copy of labeling is enclosed for your records.

Sincerely,

*Unifree K. Walters for*  
James A. Tompkins  
Product Manager 25  
Herbicide Branch  
Registration Division (7505P)

H- 2/12

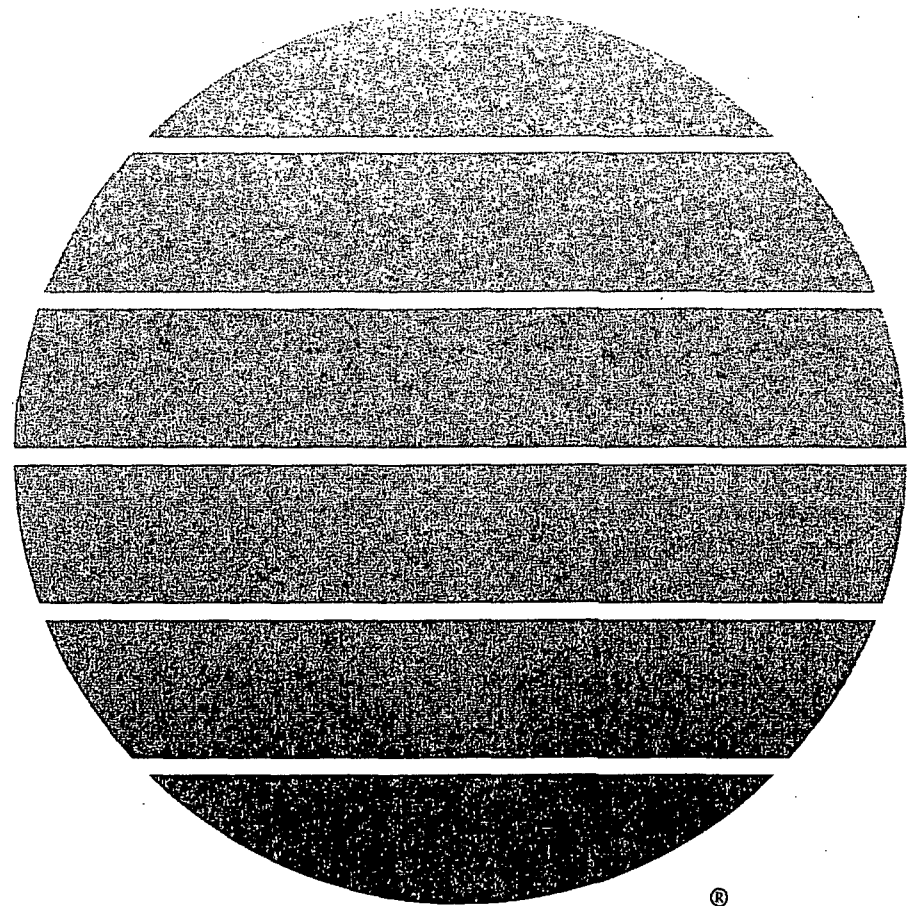


**DuPont™ Velpar®**

**AlfaMax™**

**herbicide**

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**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%
<b>TOTAL</b>	<b>100%</b>

EPA Reg. No. 352-665

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

**JAN 16 2008**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
352-665

**KEEP OUT OF REACH OF CHILDREN**

**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. 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 A on an EPA chemical resistance category selection chart.

**Pilots, flaggers and groundboom applicators must wear:**

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

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

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

Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinylchloride.

A NIOSH approved dust/mist filtering respirator with any N, R, P, or HE filter or with approval number prefix TC-21C.

Chemical resistant apron when mixing, loading, or cleaning equipment or spills.

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.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

Flaggers supporting aerial applications must use an enclosed cab that meets the definition in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)] for dermal protection.

#### USER SAFETY RECOMMENDATIONS

**USERS SHOULD:** Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning of equipment or when disposing of equipment washwater.

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™ VELPAR® ALFAMAX™ herbicide is a water-dispersible granule that is mixed in water and applied as a spray for weed control in alfalfa.

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

VELPAR® ALFAMAX™ is noncorrosive to equipment.

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

### ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

VELPAR® ALFAMAX™ is absorbed through the roots and foliage. Moisture is required to activate VELPAR® ALFAMAX™ 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™ 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™ 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™ 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™.

### 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™ 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. Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition et al v. EPA, C01-0132 C, (W.D.W.A). For further information, please refer to <http://www.epa.gov/pesticides/>.

### 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 48 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™ VELPAR® ALFAMAX™ 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 apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- Do not exceed 4.3 pounds (1.5 pounds active ingredient hexazinone) per acre per year.
- 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:

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

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

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	

#### 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:

Soils	VELPAR® ALFAMAX™ (Pounds per Acre) Percent Organic Matter in Soil	
	1-5%	>5%
<b>Coarse Texture</b>		
Loamy sand, sandy loam	1.5 - 2	3 - 4.3
<b>Medium Texture</b>		
Loam, silt loam, silt, clay loam, sandy clay loam	2 - 4.3	3 - 4.3
<b>Fine Texture</b>		
Silty clay loam, sandy clay, silty clay, clay	2 - 4.3	3 - 4.3

## WEEDS CONTROLLED

DuPont™ VELPAR® ALFAMAX™, 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)	<i>Descurainia pinnata</i>
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### 1.5 - 3 Pounds per Acre

Barnyardgrass	<i>Echinochloa crus-galli</i>
Bluegrass, annual	<i>Poa annua</i>
Catchfly, English	<i>Silene gallica</i>
Cheatgrass (downy brome)	<i>Bromus tectorum</i>
Chickweed, common	<i>Stellaria media</i>
Cocklebur*	<i>Xanthium strumarium</i>
Corn spurry	<i>Spergula arvensis</i>
Crabgrass	<i>Digitaria sp.</i>
Dogfennel (mayweed)	<i>Anthemis cotula</i>
Fiddleneck (tarweed)	<i>Amsinckia lycopsoides</i>
Filaree, redstem	<i>Erodium cicutarium</i>
Flixweed	<i>Descurainia sophia</i>
Groundsel, common	<i>Senecio vulgaris</i>
Lambsquarter, common	<i>Chenopodium album</i>
Lettuce, miners	<i>Montia perfoliata</i>
Mustard, blue	<i>Chorispora tenella</i>
Mustard, Jim Hill	<i>Sisymbrium altissimum</i>
Orchardgrass (seedling)	<i>Dactylis glomerata</i>
Pennycress, field	<i>Thlaspi arvense</i>
Pigweed	<i>Amaranthus sp.</i>
Prickly sida*	<i>Sida spinosa</i>
Purslane, common	<i>Portulaca oleracea</i>
Radish, wild	<i>Raphanus raphanistrum</i>
Ragweed, common	<i>Ambrosia elatior</i>
Rocket, London	<i>Sisymbrium irio</i>
Rocket, yellow (wintercress)	<i>Barbarea orthoceras</i>
Salsify	<i>Tragopogon sp.</i>
Sesbania, hemp*	<i>Sesbania exaltata</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sicklepod*	<i>Cassia obtusifolia</i>

\* Suppression

### 3 - 4.3 Pounds per Acre

Alfalfa (seedling)*	<i>Medicago sativa</i>
Bluegrass, perennial* (spring only)	<i>Poa compressa</i>
Buckwheat, wild	<i>Polygonum convolvulus</i>
Cockle, white*	<i>Silene alba</i>
Dandelion, common*	<i>Taraxacum officinale</i>
Dandelion, false	<i>Hypochaeris radicata</i>
Fescue, rattail	<i>Vulpia myuros</i>
Foxtail*	<i>Setaria sp.</i>
Gromwell, corn	<i>Lithospermum arvense</i>
Groundcherry (annual)	<i>Physalis sp.</i>
Knawel, annual	<i>Scleranthus annuus</i>
Lettuce, prickly (wild)	<i>Lactuca serriola</i>
Mexican tea*	<i>Chenopodium ambrosioides</i>
Morningglory (annual)	<i>Ipomoea sp.</i>
Mustard, wild	<i>Brassica kaber</i>
Quackgrass*	<i>Elytrigia repens</i>
Ryegrass, annual	<i>Lolium multiflorum</i>
Sprangletop, red	<i>Leptochloa filiformis</i>
Velvetgrass (seedling)	<i>Holcus lanatus</i>
Vernalgrass, sweet (seedling)	<i>Anthoxanthum odoratum</i>

\* 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™ using a fixed boom power sprayer or aerial equipment.

Add VELPAR® ALFAMAX™ 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™ 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™ may also be tank mixed with appropriate adjuvants used with herbicides in alfalfa.

When using VELPAR® ALFAMAX™ 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™ by following the directions below.

1. Put 1 pint of water in a quart jar.
2. Mix 2 teaspoons of VELPAR® ALFAMAX™ 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™ solution.
5. Close jar securely and shake well.
6. 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 1.5 pounds of product per acre. Sites with use rates greater than 1.5 pounds of product per acre should not be replanted to any crop (except corn as noted above) 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 berms 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.

- Unless otherwise specified in this label, treat only stands of alfalfa that have been established for at least one growing season.
- Avoid overlapping of spray swaths and shut off spray booms while starting, turning, slowing or stopping or crop injury may result.
- 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 DuPont™ VELPAR® ALFAMAX™ until the alfalfa has gone through a minimum of two growing seasons.
- On soils high in organic matter (greater than 5%), the effectiveness of 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.
- Do not apply to snow-covered or frozen ground.
- Since the effect of VELPAR® ALFAMAX™ 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.

- Do not apply to alfalfa under stress from disease, insect damage, poor root penetration due to 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 add a surfactant to VELPAR® ALFAMAX™ when treating non-dormant alfalfa.
- Do not use VELPAR® ALFAMAX™ on gravelly or rocky soils, exposed subsoils, hardpan, sand, poorly drained soil, or alkali soils.
- Response of alfalfa to VELPAR® ALFAMAX™ may vary by variety. Temporary yellowing may occur following application to the alfalfa.

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

- Do not use VELPAR® ALFAMAX™ on fields that have less than 1% organic matter.
- Do not apply more than 1.5 pounds of product per acre on fields with sandy loam or loamy sand soils having 1-2% organic matter.
- Do not apply more than 1.5 pounds of product per acre on seed alfalfa that has been established for only one growing season.

**IMPREGNATION ON DRY BULK FERTILIZER  
(EXCEPT CA AND AZ)**

Dry bulk fertilizer may be impregnated or coated with VELPAR® ALFAMAX™ for application to established alfalfa. All recommendations, cautions and special precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling. If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation, as dusty fertilizer will result in poor distribution during application. The dry fertilizer must be properly impregnated and uniformly applied to the alfalfa to avoid crop injury and/or poor weed control.

To impregnate the fertilizer, use a system consisting of a conveyor or closed drum used to blend dry bulk fertilizer. Any commonly used fertilizer can be impregnated with VELPAR® ALFAMAX™, except VELPAR® ALFAMAX™ on limestone.

Use a minimum of 250 lb dry bulk fertilizer per acre and up to a maximum of 450 lb per acre. To impregnate or coat the dry bulk fertilizer with VELPAR® ALFAMAX™ mix with sufficient water to suspend the material and thoroughly agitate. Direct the nozzles to deliver a fine spray of this suspension toward the fertilizer for thorough coverage while avoiding spray contact with mixing equipment. Uniform impregnation of VELPAR® ALFAMAX™ to dry bulk fertilizer will vary, and if the absorptivity is not adequate, the use of an absorptive powder may be required to produce a dry, free-flowing mixture. "Microcel E" is the recommended absorbent powder. When another herbicide is used with VELPAR® ALFAMAX™, mix and impregnate the fertilizer immediately. Apply impregnated fertilizer as soon as possible after impregnation for optimum performance.



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## APPLICATION INFORMATION

Uniform application of DuPont™ VELPAR® ALFAMAX™ impregnated dry fertilizer is essential for satisfactory weed control. Accurate calibration of the application equipment is essential for uniform distribution to the surface. The recommended method of application is to apply 1/2 the recommended rate and overlap 50%. This results in the best distribution pattern.

Determine the amount of VELPAR® ALFAMAX™ that should be impregnated on the dry bulk fertilizer based on the amount of fertilizer to be distributed on one acre.

### Rate Chart for Impregnating Fertilizer with VELPAR® ALFAMAX™

Fertilizer Rate/Acre	VELPAR® ALFAMAX™ Rate Per Acre			
	3/4 Lbs	1.5 Lbs	3 Lbs	4.3 Lbs
250 lbs	6.0 lbs/ton	12.0 lbs/ton	24.0 lbs/ton	34.4 lbs/ton
300 lbs	5.0 lbs/ton	10.0 lbs/ton	20.0 lbs/ton	28.7 lbs/ton
350 lbs	4.3 lbs/ton	8.6 lbs/ton	13.2 lbs/ton	24.6 lbs/ton
400 lbs	3.8 lbs/ton	7.6 lbs/ton	15.2 lbs/ton	21.5 lbs/ton
450 lbs	3.3 lbs/ton	6.6 lbs/ton	13.2 lbs/ton	19.1 lbs/ton

## CHEMIGATION

Apply this product only through center pivot sprinkler irrigation systems when alfalfa is in the dormant stage of growth. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Select the appropriate rate (see Use Rates section) for soil texture and organic matter content using 0.25" to 0.75" of sprinkler irrigation as a continuous injection during the application. Best results are obtained when soil is moist at time of application, and when weeds have not germinated or are less than 2" tall or across.

### SPRINKLER CHEMIGATION

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

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

## MIXING INSTRUCTIONS

1. Fill the supply tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of VELPAR® ALFAMAX™ and continue agitation until the VELPAR® ALFAMAX™ is fully dispersed, at least 5 minutes.
3. Once the VELPAR® ALFAMAX™ is fully dispersed, maintain agitation and continue filling tank with water. VELPAR® ALFAMAX™ should be thoroughly mixed with water before adding any other material.
4. As the tank is filling, add tank mix partners (if desired). Follow use precautions and directions on the tank mix partner label.
5. After thorough mixing, the agitation system can be stopped to prevent excessive foaming in the tank. Once thoroughly mixed the solution in the supply tank does not require additional agitation unless specified on the companion products label. If foaming occurs in the injection supply tank, a defoaming agent (defoamer) may be added.
6. Apply VELPAR® ALFAMAX™ spray mixture within 48 hours of mixing to avoid product degradation.

## USE PRECAUTIONS - CHEMIGATION

- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.
- Distributing treated water in an uneven manner can result in crop injury, lack of effectiveness, or over-tolerance pesticide residues in the crop. Therefore, to ensure that the mixture is applied evenly at the recommended rate, use sufficient water, apply the mixture for the proper length of time and ensure sprinkler produces a uniform water pattern.
- Do not permit run-off during chemigation.

## POSTING OF AREAS TO BE TREATED

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to all the following requirements:

- Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas.
- The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place

indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

- All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words "KEEP OUT", followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word "STOP". Below the symbol shall be the words "PESTICIDE IN IRRIGATION WATER".
- Posting required for chemigation does not replace other posting and reentry requirements for farm worker safety.

## 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.

## SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g, when wind is blowing away from the sensitive areas).

## SPRAY TANK CLEAN OUT

Thoroughly clean all traces of DuPont™ VELPAR® ALFAMAX™ from application equipment immediately after use. Flush the tank, pump, hoses, and boom with several changes of water after removing nozzle tips and

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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 or 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.

**Container Refilling and Disposal (For Containers up to 250 gal):** This is a refillable container. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than DuPont™ © ALFAMAX™. Reseal and return the container to any authorized DuPont refilling facility. If the container is not to be refilled, triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

**Container Disposal for Bulk Containers:** When this container is empty, replace the cap and seal all openings that have been opened during use, and return the container to the point of purchase or to a designated location named at time of purchase of this product. The container must only be refilled with this pesticide product. **DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, contact DuPont at 1-800-441-3637. If not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling. Disposal of this container must be in compliance with state and local regulations. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-441-3637 day or night.

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**LIMITATION OF WARRANTY AND LIABILITY**

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

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

**WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.**

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

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