GROUP	5	HERBICIDE

Velpar® DF CU

Agricultural Herbicide

Dispersible Granules

ACTIVE INGREDIENT:	**BY WEIGHT**
Hexazinone [3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4(1H,3H)-dione]	75%
OTHER Ingredients:	25%
	TOTAL: 100%

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 the 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 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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies involving this product, call toll free 1-866-374-1975.	
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.	

EPA Reg. No. 61842-48

EPA Est. No.

Net Weight:
Nonrefillable Container

Manufactured for:
Tessenderlo Kerley, Inc.
2255 North 44th Street, Suite 300
Phoenix, AZ 85008-3279
1-800-525-2803
www.novasource.com

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER

Corrosive, causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

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 exist, 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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product and as soon as possible wash thoroughly and put on clean clothing.

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.

DIRECTIONS FOR USE

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

VELPAR® DF CU Herbicide must be used only in accordance with instructions on this label, or in supplemental 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.

PRODUCT INFORMATION

VELPAR DF CU herbicide is a water-dispersible granule that is mixed in water and applied as a spray for weed control in certain crops.

VELPAR DF CU is an effective general herbicide providing both contact and residual control of many annual and biennial weeds and woody plants. It is also effective for control of most perennial weeds.

VELPAR DF CU is noncorrosive to equipment.

Care must be exercised when applying VELPAR DF CU near desirable trees or shrubs as they can absorb VELPAR DF CU through roots extending in to treated areas.

This product may be applied on agricultural sites that contain areas of temporary surface water caused by collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between upland and lowland sites when no water is present. DO NOT make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

VELPAR DF CU is absorbed through the roots and foliage. Moisture is required to activate VELPAR DF CU in the soil. Best results are obtained when the soil is moist at the time of application and 1/4–1/2 inches of rainfall occurs within 2 weeks after application.

For best results, apply VELPAR DF CU 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 DF CU in the soil, plants may recover from contact effects and continue to grow.

On woody plants, symptoms usually appear within 3–6 weeks after sufficient rainfall has carried the herbicide into the root zone during periods of active growth. Defoliation and subsequent refoliation may occur, but susceptible plants are killed.

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. Use the lower levels of the dosage range on coarse-textured soils and/or on soils low in organic matter. Refer to specific uses for rate ranges.

APPLICATION INFORMATION

VELPAR DF CU 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.

Dispose of the equipment washwater by applying it to a use-site listed on this label or in accordance with directions given in the “Storage and Disposal” section of this label.

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 DF CU.

TANK MIXTURES

VELPAR DF CU herbicide may be tank mixed with other herbicides and /or adjuvants registered for the crops specified in the label.

Refer to the label of the tank mix partner(s) for any additional use instructions or restrictions. The most restrictive label provisions apply. If other label instructions conflict with this label do not tank mix the herbicide and/or adjuvant with VELPAR DF CU herbicide.

RESISTANCE

VELPAR DF CU, which contains the active ingredient hexazinone, is a Group 5 herbicide based on the mode of action classification system of the Weed Science Society of America.

When herbicides with mode of action classifications that affect the same biological sites of action are used repeatedly over several years to control the same weed species in the same treatment area, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that area. 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 biological 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 instructions 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.

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

VELPAR DF CU is labeled for control of certain weeds in established alfalfa grown for hay or seed production.

- Do not apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- Do not exceed 2 pounds per acre per application.
- Do not exceed 2 pounds (1.5 pounds active ingredient hexazinone) per acre per year.

APPLICATION INFORMATION

NON-DORMANT AND SEMI-DORMANT VARIETIES

In the following states, make a single application of VELPAR DF CU during the 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	

In the following states, make a single application of VELPAR DF CU either in the spring before new growth exceeds 2 inches in height or to alfalfa stubble after cutting, following hay removal and before regrowth exceeds 2 inches in height.

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

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.

DORMANT VARIETIES
Make a single application of VELPAR DF CU after alfalfa becomes dormant and before new growth exceeds 2 inches in height in the spring. Where weeds have emerged, use a surfactant.

USE RATES

Use higher rates on hard-to-control species, (see **Weeds Controlled** section below) 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.

For dormant alfalfa, use a surfactant approved for crops at the rate of 0.25% v/v (1 quart per 100 gallons of spray solution).

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

VELPAR DF CU (Lb/Acre)
Percent Organic Matter in Soil

Soils	<1%	1-5%	>5%
Coarse Texture Loamy sand, sandy loam	2/3 -1	2/3 – 1	1 1/3 – 2
Medium Texture Loam, silt loam, silt, clay loam, sandy clay loam	2/3 -1	1 – 2	1 1/3 – 2
Fine Texture Silty clay loam, sandy clay, silty clay, clay	1 – 2	1 – 2	1 1/3 - 2

NOTE:

- In the states of MT, ND, SD, and WY, do not exceed a use rate of 1 1/3 pounds per acre on medium and fine textured soils.
- In the state of Montana (MT), do not apply to soils with less than 1.5% organic matter.
- In the state of Wyoming (WY):
  - Do not apply to soils with less than 0.5% organic matter.
  - Apply to irrigated alfalfa only.

WEEDS CONTROLLED

VELPAR DF CU, when applied preemergence or early postemergence at the following rates, is labeled for the control or suppression of the following species in alfalfa:

1/3 – 2/3 Lb/Acre

Tansymustard	*Descurainia pinnata*

2/3 – 1 1/3 Lb/Acre

Bluegrass, annual	*Poa annua*
Brome, downy (cheatgrass)	*Bromus tectorum*
Buckwheat, wild	*Polygonum convolvulus*
Catchfly, English	*Silene gallica*
Chamomile, mayweed (dogfennel)	*Anthemis cotula*
Chickweed, common	*Stellaria media*
Fiddleneck, tarweed	*Amsinckia lycopsoides*
Filaree	*Erodium* sp.
Flixweed	*Descurainia Sophia*
Groundsel, common	*Senecio vulgaris*
Henbit*	*Lamium amplexicaule*
Lettuce, Miner's	*Montia perfoliata*
Mustard, blue	*Chorispora tenella*
Mustard, Jim Hill (tumble)	*Sisymbrium altissimum*
Mustard, wild	*Brassica kaber*
Orchardgrass (seedling)	*Dactylis glomerata*
Pennycress, field	*Thlaspi arvense*
Pigweed, redroot	*Amaranthus retroflexus*
Radish, wild	*Raphanus raphanistrum*
Rocket, London	*Sisymbrium irio*
Rocket, common yellow	*Barbarea vulgaris*
Salsify	*Tragopogon* spp
Shepherdspurse	*Capsella bursa-pastoris*
Speedwell, purslane	*Veronica peregrina*
Spurry, corn	*Spergula arvensis*

1 1/3 - 2 Lb/Acre

Alfalfa* (seedling)	*Medicago sativa*
Barley, foxtail (seedling)	*Hordeum jubatum*
Bluegrass, perennial* (spring only)	*Poa* spp
Cockle, white*	*Melandrium album*
Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*
Foxtail*	*Setaria* spp
Kochia	*Kochia scoparia*
Lambsquarters, common	*Chenopodium album*
Lettuce, prickly*	*Lactuca serriola*
Mallow, common	*Malva neglecta*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Quackgrass*	*Elytrigia repens*
Speedwell, ivyleaf	*Veronica hederaefolia*
Tea, Mexican*	*Chenopodium ambrosioides*
Thistle, Canada (seedling)	*Cirsium arvense*
Thistle, Russian	*Salsola iberica*

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

VELPAR DF CU, when applied in late spring or after cutting at the following rates, will control these species listed below:

2/3 - 2 Lb/Acre

Crabgrass	*Digitaria* spp
Fleabane	*Conyza* spp
Foxtail	*Setaria* spp
Jimsonweed	*Datura stramonium*
Lambsquarters, common	*Chenopodium album*
Pigweed, redroot	*Amaranthus retroflexus*

SEED ALFALFA (CA, ID, MT, NV, OR, UT, WA)

VELPAR DF CU may be used for general broadleaf weed and grass control in established alfalfa grown for seed.

DORMANT VARIETIES

Make a single application of VELPAR DF CU after alfalfa becomes dormant and before new growth exceeds 2 inches in height in the spring. Where weeds have emerged, use a surfactant.

NON-DORMANT AND SEMI-DORMANT VARIETIES

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

WEEDS CONTROLLED

Refer to the Alfalfa - Weeds Controlled section for specific use rates and weeds controlled.

USE RESTRICTIONS FOR SEED ALFALFA

- Do not apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- Do not use VELPAR DF CU on fields with sandy loam or loamy sand soils having less than 1% organic matter.
- Do not exceed 2/3 pound per acre on fields with sandy loam or loamy sand soils having 1–2% organic matter.
- Do not exceed 2/3 pound per acre on seed alfalfa that has been established for only one growing season.

SEED ALFALFA - WALLA WALLA COUNTY, WASHINGTON

VELPAR DF CU Herbicide may be used for the suppression of prickly lettuce and quackgrass and control of Canada thistle (seedling), kochia, and certain other weeds in established alfalfa grown for seed.

Use Rates: 1 1/3 to 2 pounds per acre

Kochia	*Kochia scoparia*
Lettuce, prickly*	*Lactuca serriola*
Quackgrass*	*Elytrigia repens*
Thistle, Canada (seedling)	*Cirsium arvense*

* Suppression

USE RESTRICTIONS FOR SEED ALFALFA - WALLA WALLA COUNTY WASHINGTON

Do not apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
Do not exceed 2 pounds VELPAR DF CU herbicide per acre per application.
Do not exceed 2 pounds (1.5 pounds active ingredient hexazinone) per acre per year.

SPRAY EQUIPMENT

Apply VELPAR DF CU using a fixed boom power sprayer or aerial equipment.
For ground applications apply in a minimum of 20 gallons of spray solution per acre and by air in a minimum of 5 gallons.

CHEMIGATION FOR ALFALFA

Apply this product only through center pivot or linear-move sprinkler irrigation systems. 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 nonuniform distribution of treated water.

Severe alfalfa injury may result following application after cutting if either the regrowth is more than 2” high or significant stubble is left after alfalfa cutting.

If you have questions about calibration, you may 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 when needed.

DORMANT APPLICATIONS
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.

APPLICATION AFTER CUTTING
Apply VELPAR DF CU at 5.3 ounces per acre to stubble after cutting, following hay removal, and before regrowth exceeds 2” in height. Apply VELPAR DF CU 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.

NOTE: Making an application when daily temperatures are forecast to be in the mid-to-high 90 degree range within 3 to 5 days after treatment may increase the potential for crop injury.

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 DF CU and continue agitation until the VELPAR DF CU is fully dispersed, at least 5 minutes.
3. Once the VELPAR DF CU is fully dispersed, maintain agitation and continue filling tank with water. VELPAR DF CU must 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 DF CU spray mixture within 48 hours of mixing to avoid product degradation.

USE PRECAUTIONS - CHEMIGATION

- 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 labeled rate, use sufficient water, apply the mixture for the proper length of time and ensure sprinkler produces a uniform water pattern.

USE RESTRICTIONS - 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.
- 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 must 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.

REPLANTING (FOLLOWING ALFALFA)

- 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), provided the use rate did not exceed 1 lb per acre.
- Root crops such as potatoes, sugarbeets, radish and carrots may be planted 12 months after last treatment, provided the use rate does not exceed 2/3 lb per acre. Sites with use rates higher than 2/3 lb per acre must not be replanted to any root crop within 2 years after application of VELPAR DF CU, 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.

CROP ROTATION

Field Bioassay

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 must 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 must cross the entire field including knolls, low areas, and areas where any berms were located.

ALFALFA - IMPREGNATION ON DRY BULK FERTILIZER (EXCEPT CALIFORNIA AND ARIZONA)

Dry bulk fertilizer may be impregnated or coated with VELPAR DF CU for application to established alfalfa. All instructions 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 DF CU, except potassium nitrate or sodium nitrate. Do not use VELPAR DF CU 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 DF CU, mix 2 2/3 pounds of VELPAR DF CU with sufficient water to make one gallon of suspension 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 DF CU 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 absorbent powder of choice. When another herbicide is used with VELPAR DF CU, mix and impregnate the fertilizer immediately.

Apply impregnated fertilizer as soon as possible after impregnation for optimum performance.

Select the rate of VELPAR DF CU to apply per acre from the appropriate section of this label. Then refer to the rate chart below to determine the amount of VELPAR DF CU that is to be impregnated on a ton of dry bulk fertilizer, based on the amount of fertilizer to be distributed in one acre.

Rate Chart for Impregnating Fertilizer with VELPAR DF CU

Fertilizer Rate/Acre	**VELPAR DF CU Rate Per Acre**			
	2/3 Lbs	**1 Lbs**	**1 1/3 Lbs**	**2 Lbs**
250 lbs	5.3 lbs/ton	8.0 lbs/ton	10.6 lbs/ton	16.0 lbs/ton
300 lbs	4.4 lbs/ton	6.6 lbs/ton	8.8 lbs/ton	13.3 lbs/ton
350 lbs	3.7 lbs/ton	5.7 lbs/ton	7.5 lbs/ton	11.4 lbs/ton
400 lbs	3.3 lbs/ton	5.0 lbs/ton	6.7 lbs/ton	10.0 lbs/ton
450 lbs	2.9 lbs/ton	4.4 lbs/ton	5.9 lbs/ton	8.9 lbs/ton

For rates other than those listed, use the following formula to calculate the amounts of VELPAR DF CU to be impregnated per ton of dry fertilizer.

Lbs VELPAR DF CU Per Acre	X	1 Ton Fertilizer	=	Lbs VELPAR DF CU per Ton of Fertilizer

APPLICATION

Uniform application of VELPAR DF CU-impregnated dry fertilizer is essential for satisfactory weed control. Accurate calibration of the application equipment is essential for uniform distribution to the surface. The customary method of application is to apply 1/2 the labeled rate and overlap 50%. This results in the best distribution pattern.

USE PRECAUTIONS - ALFALFA

- Best results are obtained when 1/2–1 inches 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 VELPAR DF CU can be significantly reduced and weed control may be unsatisfactory.
- Avoid overlapping of spray swaths and shut off spray booms while starting, turning, slowing or stopping or crop injury may result.
- 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.

USE RESTRICTIONS - ALFALFA

- Do not apply to snow-covered or frozen ground.
- Crop injury to alfalfa can be influenced by several factors including alfalfa variety, soil conditions, uniformity of application and environmental conditions, etc., if no prior use history for the site or variety, treat only a small area when first using VELPAR DF CU.
- 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 DF CU applications.
- Treat only stands of alfalfa established for one year or for one growing season (except in California), provided:
  - The alfalfa stand has a well developed tap root structure that is at least 10 inches in length (0.25 inch diameter below the crown) 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 shorter growing seasons, such as, higher elevations, adequate alfalfa tap root growth may not occur and especially when alfalfa is grown together with a cover or nurse crop. If an adequate tap root is not present, delay application of VELPAR DF CU until the alfalfa has gone through a minimum of two growing seasons.
- In California, fall planted alfalfa may be treated in the following winter months with VELPAR DF CU at 1/3 to 2/3 pounds per acre (use higher rate for fine textured soils) provided:
  - 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 use VELPAR DF CU on seedling alfalfa, alfalfa-grass mixtures, or other mixed stands as injury may result to the seedling alfalfa or companion crop.
- Do not use a surfactant with VELPAR DF CU when treating non-dormant alfalfa.
- Do not use VELPAR DF CU on gravelly or rocky soils, exposed subsoils, hardpan, sand, poorly drained soil, or alkali soils.

BLUEBERRY

HIGH BUSH BLUEBERRIES

VELPAR DF CU is labeled for control of certain herbaceous and woody weeds in established high bush blueberry fields.

APPLICATION INFORMATION

VELPAR DF CU may be applied to high bush blueberries that have been established for 3 or more years. Apply VELPAR DF CU in the spring before the lower leaves of the blueberry plant have fully expanded. Avoid contact of the leaves with the spray solution.

Using calibrated ground spray equipment, make the application in sufficient water to provide thorough and uniform coverage to the treated area (usually 20 gallons per acre). Shut off spray booms when starting, turning, slowing or stopping, or injury to the crop may result.

USE PRECAUTIONS FOR HIGH BUSH BLUEBERRIES

- Application to blueberry foliage will result in crop injury.
- Since the effect of VELPAR DF CU on blueberries varies with soil type, plant vigor, uniformity of applications and amount of rainfall, it is suggested that growers limit their first use to small areas.

USE RESTRICTIONS FOR HIGH BUSH BLUEBERRIES

- Do not apply through any type of irrigation system.
- Do not apply within 90 days of harvest.
- Do not apply to flooded field with standing water.

USE RATES (Lbs/Acre)

HIGH BUSH BLUEBERRIES

Soil Texture	Less than or equal to 3% organic matter	Greater than 3% organic matter
Coarse loamy sand, sandy loam (50-85% sand)	1.3	1.6
Medium loam, silt loam, silt, clay loam, sandy clay loam		2.6
Fine silty clay loam, clay loam, sandy clay, silty clay, clay	1.3 – 2*	2.6

*Use the higher rate as the soil organic matter approaches 3%.

LOW BUSH BLUEBERRIES

VELPAR DF CU may be used for the control of certain weeds in low bush blueberries.

APPLICATION INFORMATION

VELPAR DF CU may only be applied to pruned blueberry fields in the spring before leaf emergence. Using calibrated ground spray equipment, make the application in sufficient water to provide thorough and uniform coverage to the treated area (usually 20 gallons per acre). Shut off spray booms when starting, turning, slowing or stopping, or injury to the crop may result.

USE PRECAUTIONS FOR LOWBUSH BLUEBERRIES

- Application to blueberry foliage will result in crop injury.
- Since the effect of VELPAR DF CU on blueberries varies with soil type, plant vigor, uniformity of applications and amount of rainfall, it is suggested that growers limit their first use to small areas. If excessive leaf drop is observed after treatment, reduce rate in future applications.
- Maintain a 50 foot buffer from any well head or water reservoir.

USE RESTRICTIONS FOR LOWBUSH BLUEBERRIES

- Do not apply through any type of irrigation system.
- Do not apply to flooded field with standing water.
- Do not apply within 450 days of harvest.
- Do not exceed 2.4 pounds per acre if field has been treated with hexazinone within the past 8 years.

LOW BUSH BLUEBERRIES (LBS/ACRE)

Soil Texture	Less than or equal to 3% organic matter	Greater than 3% organic matter
Coarse loamy sand, sandy loam (50-85% sand)	1.2	1.6
Medium loam, silt loam, silt, clay loam, sandy clay loam		2
Fine silty clay loam, clay loam, sandy clay, silty clay, clay	1.2 – 2.4*	2.4 – 3.6**

*Use the higher rate as the soil organic matter approaches 3%.
**Use the higher rate for harder to control species.

IMPREGNATION ON DRY BULK FERTILIZER

Dry bulk fertilizer may be impregnated or coated with VELPAR DF CU for application to established high bush or low bush blueberries. All instructions 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 DF CU, except potassium nitrate or sodium nitrate. Do not use VELPAR DF CU 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 DF CU, mix 2 2/3 pounds of VELPAR DF CU with sufficient water to make one gallon of suspension 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 DF CU 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 absorbent powder of choice. When another herbicide is used with VELPAR DF CU, mix and impregnate the fertilizer immediately.

Apply impregnated fertilizer as soon as possible after impregnation for optimum performance.

Select the rate of VELPAR DF CU to apply per acre from the appropriate section of this label. Then refer to the rate chart below to determine the amount of VELPAR DF CU that is to be impregnated on a ton of dry bulk fertilizer, based on the amount of fertilizer to be distributed in one acre.

Rate Chart for Impregnating Fertilizer with \ VELPAR DF CU

Fertilizer Rate/Acre	**VELPAR DF CU Rate Per Acre**			
	2/3 Lbs	**1 Lbs**	**1 1/3 Lbs**	**2 Lbs**
250 lbs	5.3 lbs/ton	8.0 lbs/ton	10.6 lbs/ton	16.0 lbs/ton
300 lbs	4.4 lbs/ton	6.6 lbs/ton	8.8 lbs/ton	13.3 lbs/ton
350 lbs	3.7 lbs/ton	5.7 lbs/ton	7.5 lbs/ton	11.4 lbs/ton
400 lbs	3.3 lbs/ton	5.0 lbs/ton	6.7 lbs/ton	10.0 lbs/ton
450 lbs	2.9 lbs/ton	4.4 lbs/ton	5.9 lbs/ton	8.9 lbs/ton

For rates other than those listed, use the following formula to calculate the amounts of VELPAR DF CU to be impregnated per ton of dry fertilizer.

Lbs VELPAR DF CU Per Acre	X	1 Ton Fertilizer	=	Lbs VELPAR DF CU per Ton of Fertilizer

APPLICATION
Uniform application of VELPAR DF CU-impregnated dry fertilizer is essential for satisfactory weed control. Accurate calibration of the application equipment is essential for uniform distribution to the surface. The customary method of application is to apply 1/2 the labeled rate and overlap 50%. This results in the best distribution pattern.

WEEDS CONTROLLED

VELPAR DF CU is labeled for the control or suppression of the following species in high and low bush blueberry crops:

Aster, heath*	*Aster ericoides*
Barnyardgrass	*Echinochloa crus-galli*
Blackberry* (briar)	*Rubus* spp
Bluegrass, Kentucky (perennial)*	*Poa pratensis*
Brome, downy (cheatgrass)	*Bromus tectorum*
Broomsedge*	*Andropogon virginicus*
Carrot, wild*	*Daucus carota*
Catchfly, English	*Silene gallica*
Chamomile, mayweed	*Anthemis cotula*
Cherry, wild	*Prunus serotia*
Chickweed, common	*Stellaria media*
Cinquefoil	*Potentilla* spp
Cockle, white*	*Melandrium album*

Dandelion, common*	*Taraxacum officinale*
Dandelion, false* (spotted catsear)	*Hypochaeris radicata*
Daisy, oxeye	*Chrysanthemum leucanthemum*
Dock, curly*	*Rumex crispus*
Dogfennel	*Eupatorium capillifolium*
Fescue*	*Festuca* spp
Fiddleneck, tarweed	*Amsinckia lycopsoides*
Filaree	*Erodium* spp
Fireweed*(willowweed)	*Epilobium angustifolium*
Fleabane, flax-leaved	*Conyza bonariensis*
Flixweed	*Descurainia Sophia*
Foxtail, yellow	*Setaria lutescens*
Goldenrod	*Solidago* spp
Groundsel, common	*Senecio vulgaris*
Hawkweed	*Hieracium* spp
Horseweed/marestail	*Conyza canadensis*
Jimsonweed	*Datura stramonium*
Lambsquarters, common	*Chenopodium album*
Lettuce, Miner's	*Montia perfoliata*
Lettuce, prickly*	*Lactuca serriola*
Mustard, blue	*Chorispora tenella*
Mustard, Jim Hill (tumble)	*Sisymbrium altissimum*
Orchardgrass*	*Dactylis glomerata*
Orchardgrass (seedling)	*Dactylis glomerata*
Panicgrass (witchgrass)	*Panicum capillare*
Panicum, fall	*Panicum dichotomiflorum*
Pearly everlasting	*Anaphalis margaritacea*
Pennycress, field	*Thlaspi arvense*
Pigweed, redroot	*Amaranthus retroflexus*
Quackgrass	*Agropyron repens*
Radish, wild	*Raphanus raphanistrum*
Ragweed, common	*Ambrosia elatior*
Raspberry* (briar)	*Rubus* spp
Rocket, London	*Sisymbrium irio*
Rocket, common yellow	*Barbarea vulgaris*
Ryegrass, Italian (annual)	*Lolium multiflorum*
Ryegrass, perennial*	*Lolium perenne*
Salsify	*Tragopogon* spp
Shepherdspurse	*Capsella bursa-pastoris*
Smartweed, Pennsylvania	*Polygonum pensylvanicum*
Sorrel, red	*Rumex acetosella*
Sorrel, sheep	*Rumex angiocarpus*
Spurry, corn	*Spergula arvensis*
Strawberry, wild	*Fragaria virginiana*
Tansymustard (pinnate)	*Descurainia pinnata*
Tea, Mexican*	*Chenopodium ambrosioides*
Velvetgrass	*Holcus lanatus*
Yarrow	*Achillea* spp

2.4 to 3.6 Lbs/acre

Dogbane**	*Apocynum* spp
Meadow-sweet	*Filipendula ulmaria*
Blackberry, trailing	*Rubus ursinus*
Laurel, sheep	*Kalmia angustifolia*
Rose, wild**	*Rosa* spp

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

PINEAPPLE

VELPAR DF CU is labeled for control of certain weeds in pineapple.

APPLICATION INFORMATION

Mix the proper amount of VELPAR DF CU in water. Add a surfactant at the rate of 0.25% V/V.
Use the lower rates on coarse-textured soils or in areas where rainfall exceeds 65 inches per year. Use the higher rates on fine-textured soils or in areas where rainfall is less than 65 inches per year.

Intercrop period - Apply VELPAR DF CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 1/3 - 2 1/3 pounds per acre. For aerial application, use at least 10 gal water per acre.

Post mulch, preplant - Apply VELPAR DF CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 1/3 - 2 1/3 pounds per acre.

Post plant, before planted cuttings start active growth - Apply VELPAR DF CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 1/3 - 2 1/3 pounds per acre. When weed growth has escaped control by other herbicide applications, a post-planting application may be made after the planted cuttings start to grow.

Prior to forcing first ratoon - Apply VELPAR DF CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 1/3 - 2 1/3 pounds per acre.

Directed postemergence (pineapple and weeds) inter-space application - Apply VELPAR DF CU as a directed spray 3–10 months after planting in 50–200 gallons of water per acre (broadcast basis) at the rate of 1/3 - 2 1/3 pounds per acre (broadcast basis) using a stroller boom or knapsack.

Directed spot treatments for perennial grasses before floral induction - Spray perennial grasses postemergence to wet (50–200 gallons per acre depending on size) with 1 1/3 - 2 1/3 pounds per 100 gallons of water as a spot treatment.

Treatments to field edges and roadsides - Apply VELPAR DF CU at 2 1/3 - 4 8/10 pounds per acre in 100–400 gallons of water.

WEEDS CONTROLLED

VELPAR DF CU is labeled for the control or suppression of the following species in pineapple crops:

Ageratum, tropic	*Ageratum conycoides*
Balsamapple	*Momordica charantia*
Castorbean	*Ricinus communis*
Crabgrass	*Digitaria* spp
Crotalaria	*Crotolaria* spp
Dallisgrass	*Paspalum dilatatum*
Guineagrass	*Panicum maximum*
Junglerice	*Echinochloa colonum*
Kao haole*	*Leucaena glauca*
Moana loa vine*	*Canavalia cathartica*
Morningglory	*Ipomoea* spp
Oxalis	*Oxalis* spp
Popolo	*Solanum sandwicense*
Richardsonium	*Richardsonia* spp
Vaseygrass	*Paspalum urvillei*

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

USE RESTRICTIONS - PINEAPPLE

- Do not exceed 4.8 lb VELPAR DF CU per acre per crop.
- Do not apply VELPAR DF CU within 181 days of harvest.

SUGARCANE

VELPAR DF CU is labeled for selective weed control in sugarcane except in the State of Florida.

APPLICATION INFORMATION

Apply a single treatment of VELPAR DF CU per year using a fixed-boom sprayer and a minimum of 25 gallons per acre unless otherwise directed.

HAWAII

Apply VELPAR DF CU pre- or postemergence at the following rates for the indicated soil texture:

Soils	VELPAR DF CU (Lbs/Acre) (Plus surfactant 0.25% by volume)
Coarse Texture Sand, loamy sand, sandy loam	2/3 – 1 2/10
Medium Texture Loam, silt loam, silty clay loam	2/3 – 2 1/3
Fine Texture Clay, gray hydromorphic clay	2 1/3 – 4 8/10

Use the higher levels of the labeled rate ranges on soils high in organic matter. Do not apply more than twice the highest labeled rate for the indicated soil texture per crop (18–24 months).

Add an adjuvant for all uses.

For preemergence use only, VELPAR DF CU may be applied with aerial equipment using at least 10 gallons of spray per acre.

Apply VELPAR DF CU herbicide as a spot spray application for emerged weeds in sugarcane. Mix 1 to 4 pounds of VELPAR DF CU per 100 gallons of water. Apply a sufficient volume of spray solution to thoroughly wet weed foliage but do not exceed a use rate of 4.8 pounds per acre. Use the lower concentrations on coarse-textured soils that are low in organic matter, and use the higher concentrations on fine-textured soils that are high in organic matter.

LOUISIANA

Apply 2/3 - 1 2/10 pound of VELPAR DF CU per acre broadcast in the fall before sugarcane emerges or in the spring before active cane tillering begins. Fall treatments of 2/3 - 1 2/10 pound per acre may be followed by a spring treatment of 2/3 - 1 2/10 pound per acre. Do not apply more than 2 pound per year. Use the lower rates on coarse textured soils and the higher rates on fine textured soils.

PUERTO RICO

For preemergence treatments, apply 1/3 - 2/3 pound of VELPAR DF CU per acre.

For postemergence treatments, apply 1/3 - 2/3 pound of VELPAR DF CU per acre to weeds after they have emerged. Use the lower rates on coarse-textured soils and the higher rates on fine-textured soils (high in clay or organic matter). Each ratoon may receive up to 2/3 pound of VELPAR DF CU per acre.

For spot treatment of emerged weeds, VELPAR DF CU may be applied with a knapsack sprayer in concentrations of 1/3 - 2/3 pound per 100 gallons of water. Apply a sufficient spray volume to wet the weed foliage. Do not exceed 100 gallons of spray per treated acre. Use the lower concentration on coarse-textured soils and the higher concentration on fine-textured soils.

Note: Since it is difficult to calibrate “spot” knapsack applications, extra care must be taken not to exceed the rate equivalent of the maximum of 2/3 pound VELPAR DF CU per acre.

Do not apply more than 1 1/3 pound of VELPAR DF CU per acre per crop season.

TEXAS

Apply 2/3 - 2 1/3 pound of VELPAR DF CU per acre. On plant cane, apply the herbicide before the cane emerges or as a directed layby treatment. On stubble cane, apply VELPAR DF CU preemergence to early postemergence (up to the 3-

leaf stage) or as a directed layby treatment. A pre- or early postemergence treatment may be followed by a layby treatment, provided at least 60 days have elapsed and 3 inches of rainfall or sprinkler irrigation have occurred since the first treatment.

Do not apply more than 2 1/3 pound of VELPAR DF CU per acre per season.

Use the following rates according to the different soil textures:

	VELPAR DF CU (Lbs/Acre)		
Soils	**Preemergence**	**+**	**Layby**
Coarse Texture Sandy Loam	1/3		1/3
Medium Texture Loam, silt loam	9/10		9/10
Fine Texture Clay loam	1 1/3		1 1/3

* With at least 2% organic matter
On dormant cane, a surfactant may be added to the spray mixture to increase control of emerged weeds.

WEEDS CONTROLLED

VELPAR DF CU is labeled for the control or suppression of the following species in sugarcane crops:

Ageratum, tropic*	*Ageratum conycoides*
Alexandergrass	*Brachiaria plantaginea*
Balsamapple	*Momordica charantia*
Barnyardgrass	*Echinochloa crus-galli*
Bermudagrass*	*Cynodon dactylon*
Burnweed, American (fireweed)	*Erechtites hieracifolius*
Chickweed, common	*Stellaria media*
Crabgrass, large	*Digitaria sanguinalis*
Crabgrass, smooth	*Digitaria ischaemum*
Crotalaria, fuzzy	*Crotalaria incana*
Crotalaria, showy	*Crotalaria spectabilis*
Cuphea, tarweed	*Cuphea carthagenensis*
Dallisgrass	*Paspalum dilatatum*
Fingergrass, radiate	*Chloris radiata*
Fingergrass, swollen	*Chloris barbata*
Foxtail, bristly	*Setaria verticillata*
Foxtail, yellow	*Setaria lutescens*
Geranium, Carolina	*Geranium carolinianum*
Goosegrass	*Elusine indica*
Guineagrass	*Panicum maximum*
Henbit	*Lamium amplexicaule*
Itchgrass*	*Rottboellia cochinchinensis*
Job's-tears	*Coix lacryma*
Johnsongrass (seedling)	*Sorghum halepense*
Junglerice	*Echinochloa colonum*
Lambsquarters, common	*Chenopodium album*
Millet, Texas	*Panicum texanum*
Morningglory, hairy	*Ipomoea pentaphylla*
Morningglory, threelobe	*Ipomoea triloba*
Mustard, wild	*Sinapis arvensis*
Oxalis	*Oxalis* spp
Paintbrush, Flora's	*Emilia sonchifolia*
Panicum, browntop	*Panicum fasciculatum*
Paspalum, ricegrass	*Paspalum orbiculare*
Paspalum, sour	*Paspalum conjugatum*
Pigweed, redroot	*Amaranthus retroflexus*
Pigweed, slender (green)	*Amaranthus viridus*
Pigweed, smooth	*Amaranthus chlorostachys*

Popolo	*Solanum sandwicense*
Purslane, common	*Portulaca oleracea*
Sandbur	*Cenchrus* spp
Sensitive plant (hila hila)	*Mimosa* spp
Signalgrass, broadleaf	*Brachiaria platyphylla*
Sowthistle, common	*Sonchus oleraceus*
Spanishneedles	*Bidens bipinnata*
Sprangletop	*Leptochloa* spp
Spurge, prostrate	*Euphorbia humistrata*
Spurge, graceful	*Chamaesyce hypericifolia*
Sunflower	*Helianthus* spp
Vaseygrass	*Paspalum urvillei*
Waltheria (hia loa)	*Waltheria* spp

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

USE RESTRICTIONS - SUGARCANE

- Do not plant any crop other than sugarcane following an application of VELPAR DF CU.
- Do not feed sugarcane forage to livestock.
- Do not apply VELPAR DF CU:
  - Within 180 days of harvest in Hawaii.
  - Within 234 days of harvest in Louisiana.
  - Within 288 days of harvest in Puerto Rico.
  - Within 234 days of harvest in Texas.
- To avoid injury to sugarcane, observe the following:
  - Do not use VELPAR DF CU on cane that shows poor vigor because of insect damage, disease, or winter injury, or shows symptoms of other stress conditions such as drought stress.
  - Do not add a surfactant in applications unless otherwise specified.
  - Do not use VELPAR DF CU on gravelly or rocky soils, thinly covered subsoils, or coarse-textured soils (sands to sandy loams) with less than 1% organic matter.
  - Temporary chlorosis of the crop may result from application over emerged cane. Applications during active cane growth must be directed to cover the weeds and soil while minimizing crop contact.
  - Do not use VELPAR DF CU on varieties known to be susceptible to herbicides.
- Extremely heavy rainfall after application may result in poor weed control and/or crop injury, especially if the application is made to dry soil.

ADDITIONAL INSTRUCTIONS, PRECAUTIONS, AND RESTRICTIONS FOR AGRICULTURAL USES

SPRAY TANK CLEAN OUT

Thoroughly clean all traces of VELPAR DF CU 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.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

IMPORTANCE OF DROPLET SIZE

The most effective drift management strategy is to apply the largest droplets which are consistent with pest control objectives. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions.

A droplet size classification system describes the range of droplet sizes produced by spray nozzles. The American Society of Agricultural and Biological Engineers (ASABE) provide a Standard that describes droplet size spectrum categories defined by a number of reference nozzles (fine, coarse, etc.). Droplet spectra resulting from the use of a

specific nozzle may also be described in terms of volume mean diameter (VMD). Coarser droplet size spectra have larger VMD's and lower drift potential.

CONTROLLING DROPLET SIZE - GROUND APPLICATION

- **Nozzle Type** - Select a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. The use of low-drift nozzles will reduce drift potential.
- **Pressure** - The lowest spray pressures recommended for the nozzle produce the largest droplets. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, using a higher-capacity nozzle instead of increasing pressure results in the coarsest droplet spectrum.
- **Flow Rate/Orifice Size -** Using the highest flow rate nozzles (largest orifice) that are consistent with pest control objectives reduces the potential for spray drift. Nozzles with higher rated flows produce coarser droplet spectra.

CONTROLLING DROPLET SIZE – AIRCRAFT

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

BOOM LENGTH (AIRCRAFT), AND APPLICATION HEIGHT

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

WIND

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

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

TEMPERATURE AND HUMIDITY

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

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which may cause small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.

They begin to form as the sun sets and often continue into the morning. Mist or fog may indicate the presence of an inversion in humid areas. Inversions may also be identified by producing smoke and observing its behavior. Smoke that remains close to the ground, or moves laterally in a concentrated cloud under low wind conditions indicates a surface inversion. Smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRAYERS

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

AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS
Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result.

It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, that it is configured properly, and that drift potential has been minimized.

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

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

DRIFT CONTROL ADDITIVES
Using product compatible drift control additives can reduce drift potential. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the additive's label. If using an additive that increases viscosity, ensure that the nozzles and other application equipment will function properly with a viscous spray solution.

Preferred drift control additives have been certified by the Chemical Producers and Distributors Association (CPDA).

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage 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 HANDLING: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.
Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): **Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.
Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): **Nonrefillable container.** Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.
Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Pressure rinse as follows: Empty the remaining product contents into application equipment or a mix tank. Insert pressure rinsing nozzle in the container, and rinse at about 40 PSI for at least 30 seconds. Drain rinsate for 10 seconds after the flow begins to drip. Pour or pump rinsate into application equipment or rinsate collection system. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.
Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Nonrefillable container. Do not reuse or refill this container. Completely empty paper or

plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with VELPAR DF CU herbicide containing hexazinone only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. **Disposing of Fiber Drum and/or Liner:** Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

All Other Refillable Containers: Refillable container. Refilling Container: Refill this container with VELPAR DF CU herbicide containing hexazinone only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. Check for leaks after refilling and before transporting.

Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding).

Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then, (a) for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning; if burned, stay out of smoke, or (b) for Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Outer Pouches of Water Soluble Packets (WSP): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously.

Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact CHEMTREC, 1-800-424-9300, day or night.

WARRANTY AND LIMITATION OF DAMAGES

Tessenderlo Kerley, Inc. (TKI) warrants only that this product conforms to the product description on the label. Except as warranted by this label, TKI makes no representation or warranty or guarantee, whether expressed or implied, of fitness for a particular purpose of merchantability, or of product performance. TKI does not authorize any agent or representative to make any such representation, warranty or guarantee. To the extent consistent with applicable law, TKI's maximum liability for breach of its warranty or for use of this product, regardless of the form of action, shall be limited to the purchase price of this product. To the extent consistent with applicable law, buyer and user acknowledge and assume all risks and disposal liability resulting from handling, storage, use and disposal of this product. If buyer does not agree with or accept these warranty and liability limitations, buyer may return the unopened container to the place of purchase for full refund. Buyer's use of this product shall constitute conclusive evidence of buyer's acknowledgement and acceptance of the forgoing limitations. Some jurisdictions do not allow the exclusion of implied warranties or the limitation of certain damages, so the above may not apply. The purchase, delivery, acceptance and use of this product by the buyer are subject to the terms and conditions of seller's sales invoice for this product.

01-072016EPA