



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

February 26, 2025

Maryanne Kellogg
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Gig Harbor, WA 98332

Subject: Label Amendment - Registration Review Mitigation for Hexazinone
Product Name: Velpar DF CU
EPA Registration Number: 61842-48
Application Date: May 17, 2019
Decision Number: 596674

Dear Maryanne Kellogg:

The Agency, in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the hexazinone Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. You must

submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

If you have any questions about this letter, please contact Concepción Rodríguez by phone at 202-566-0820, or via email at rodriguez.concepcion@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington", with a stylized flourish at the end.

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

ENCLOSURE: Stamped label

[Note to reviewer: [Text] in brackets denotes optional text.

Velpar[®] DF CU
Agricultural Herbicide

HEXAZINONE	GROUP	5	HERBICIDE
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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%

EPA Reg. No. 61842-48

Nonrefillable Container

Net: _____

OR

Refillable Container

Net: _____

ACCEPTED

Feb 26, 2025

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 61842-48

EPA Est. No. _____

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 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 1-866-374-1975 for medical emergencies involving this product.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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.

Mixers and loaders supporting chemigation, groundboom, or aerial application to alfalfa, sugarcane, pineapple, or low- or high-bush blueberries must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastometric particulate respirator with an N, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

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.

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S641)
- If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor blade diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

MANDATORY SPRAY DRIFT MANAGEMENT

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy. For all other ground applications, the nozzle must be no more than 4 feet from the target vegetation.
- Applicators are required to use a medium or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume – Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure – Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle – Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- Adjust nozzles – Follow nozzle manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce the effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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 an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

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.

WEED RESISTANCE MANAGEMENT

For resistance management, VELPAR DF CU is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to VELPAR DF CU and other Group 5 herbicides. Weed species with acquired resistance to Group 5 herbicides may eventually dominate the weed population if Group 5 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by VELPAR DF CU or other Group 5 herbicides. Users should scout before and after application.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To delay herbicide resistance:

- Avoid the consecutive use of VELPAR DF CU or other target site of action Group 5 herbicides that might have a similar target site of action, on the same weed species.
- Use tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank mix or prepack rate on the weed(s) of concern (an herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides)

- Base herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Scout fields prior to application to identify the weed species present and their growth state to determine if the intended application will be effective.
- Scout fields after application to verify that the treatment was effective.
- Contact your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

Report any incidence of non-performance of this product against a particular weed species to your Tessenlo Kerley, Inc. representative. If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemicals means to remove escapes, as practical with the goal of preventing further seed production.

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 1 pound (0.75 lb ai hexazinone) per acre per application.
- Do not exceed 2 pounds (1.5 lbs ai hexazinone) per acre per year.
- Do not exceed 2 applications of VELPAR DF CU 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

Apply VELPAR DF CU preemergence or early postemergence at 2/3 to 1 pound of VELPAR DF CU (0.5 lb – 0.75 lb ai hexazinone) per acre per application. Use higher rates on hard-to-control species, (see **Weeds Controlled** section below), high organic matter soils, finer textured soils, 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:

RESTRICTION:

- In the states of MT, ND, SD, and WY, do not exceed a use rate of 1 pound (0.75 lb ai hexazinone) 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 OR SUPPRESSED

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 (0.25 lb – 0.5 lb ai hexazinone)

Tansymustard

Descurainia pinnata

2/3 - 1 Lb/Acre (0.5 lb – 0.75 lb ai hexazinone)

Bluegrass, annual
Brome, downy (cheatgrass)
Buckwheat, wild
Catchfly, English
Chamomile, mayweed (dogfennel)
Chickweed, common
Fiddleneck, tarweed
Filaree
Flixweed
Groundsel, common
Henbit*
Lettuce, Miner's
Mustard, blue
Mustard, Jim Hill (tumble)
Mustard, wild
Orchardgrass (seedling)
Pennycress, field
Pigweed, redroot
Radish, wild
Rocket, London
Rocket, common yellow
Salsify
Shepherdspurse*
Speedwell, purslane
Spurry, corn

Poa annua
Bromus tectorum
Polygonum convolvulus
Silene gallica
Anthemis cotula
Stellaria media
Amsinckia lycopsoides
Erodium sp.
Descurainia Sophia
Senecio vulgaris
Lamium amplexicaule
Montia perfoliata
Chorispora tenella
Sisymbrium altissimum
Brassica kaber
Dactylis glomerata
Thlaspi arvense
Amaranthus retroflexus
Raphanus raphanistrum
Sisymbrium irio
Barbarea vulgaris
Tragopogon spp.
Capsella bursa-pastoris
Veronica peregrina
Spergula arvensis

* 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 offer partial control or suppression of these species listed below:

2/3 - 1 Lb/Acre (0.5 lb – 0.75 lb ai hexazinone)

Crabgrass
Fleabane
Foxtail
Jimsonweed
Lambsquarters, common
Pigweed, redroot

Digitaria spp
Conyza spp
Setaria spp.
Datura stramonium
Chenopodium album
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 (0.5 lb ai hexazinone) per acre on fields with sandy loam or loamy sand soils having 1–2% organic matter.
- Do not exceed 2/3 pound (0.5 lb ai hexazinone) per acre on seed alfalfa that has been established for only one growing season.
- For all other applications, do not exceed 1 pound (0.75 lb ai hexazinone) per acre per application.
- Do not exceed 2 applications 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 (0.75 lb ai hexazinone) 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 (0.5 lb ai hexazinone) per acre. Sites with use rates higher than 2/3 lb (0.5 lb ai hexazinone) 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 (2 lbs ai hexazinone) 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.

$$\begin{array}{lcl} \text{Lbs VELPAR DF CU} & \times & \text{1 Ton} \\ \text{Per Acre} & & \text{Fertilizer} \end{array} = \begin{array}{l} \text{Lbs VELPAR DF CU per} \\ \text{Ton of Fertilizer} \end{array}$$

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 (0.25 lb – 0.5 lb ai hexazinone) 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.
- Do not exceed 2.6 pounds VELPAR DF CU (1.9 lbs ai hexazinone) per acre per application.
- Do not exceed 2 applications per year.

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%.

**1.3 lb VELPAR DF CU contains 0.98 lb ai hexazinone. 1.6 lb VELPAR DF CU contains 1.2 lbs ai hexazinone. 2 lbs VELPAR DF CU contains 1.5 lbs ai hexazinone. 2.6 lbs VELPAR DF CU contains 1.9 lbs ai hexazinone.

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 (1.8 lbs ai hexazinone) per acre if field has been treated with hexazinone within the past 8 years.
- Do not exceed 3.6 pounds VELPAR DF CU (2.7 lbs ai hexazinone) per acre per application.
- Do not exceed 2 applications per year.

LOW BUSH BLUEBERRIES

USE RATES (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.

***1.2 lbs VELPAR DF CU contains 0.9 lb ai hexazinone. 1.6 lbs VELPAR DF CU contains 1.2 lbs ai hexazinone. 2 lbs VELPAR DF CU contains 1.5 lbs ai hexazinone. 2.4 lbs VELPAR DF CU contains 1.8 lbs ai hexazinone. 3.6 lbs VELPAR DF CU contains 2.7 lbs ai hexazinone.

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 (2 lbs ai hexazinone) 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 X 1 Ton = Lbs VELPAR DF CU per
Per Acre Fertilizer 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*
Barnyardgrass
Blackberry* (briar)
Bluegrass,
Kentucky (perennial)*
Brome, downy (cheatgrass)
Broomsedge*
Carrot, wild*
Catchfly, English
Chamomile, mayweed
Cherry, wild

Aster ericoides
Echinochloa crus-galli
Rubus spp

Poa pratensis
Bromus tectorum
Andropogon virginicus
Daucus carota
Silene gallica
Anthemis cotula
Prunus serotia

Chickweed, common
 Cinquefoil
 Cockle, white*
 Dandelion, common*
 Dandelion, false*
 (spotted catsear)
 Daisy, oxeye
 Dock, curly*
 Dogfennel
 Fescue*
 Fiddleneck, tarweed
 Filaree
 Fireweed*(willowweed)
 Fleabane, flax-leaved
 Flixweed
 Foxtail, yellow
 Goldenrod
 Groundsel, common
 Hawkweed
 Horseweed/marestail
 Jimsonweed
 Lambsquarters, common
 Lettuce, Miner's
 Lettuce, prickly*
 Mustard, blue
 Mustard, Jim Hill (tumble)
 Orchardgrass *
 Orchardgrass (seedling)
 Panicgrass (witchgrass)
 Panicum, fall
 Pearly everlasting
 Pennycress, field
 Pigweed, redroot
 Quackgrass
 Radish, wild
 Ragweed, common
 Raspberry* (briar)
 Rocket, London
 Rocket, common yellow
 Ryegrass, Italian (annual)
 Ryegrass, perennial*
 Salsify
 Shepherdspurse
 Smartweed, Pennsylvania
 Sorrel, red
 Sorrel, sheep
 Spurry, corn
 Strawberry, wild
 Tansymustard (pinnate)
 Tea, Mexican*
 Velvetgrass
 Yarrow

Stellaria media
Potentilla spp
Melandrium album
Taraxacum officinale

Hypochaeris radicata
Chrysanthemum leucanthemum
Rumex crispus
Eupatorium capillifolium
Festuca spp
Amsinckia lycopoides
Erodium spp
Epilobium angustifolium
Conyza bonariensis
Descurainia Sophia
Setaria lutescens
Solidago spp
Senecio vulgaris
Hieracium spp
Conyza canadensis
Datura stramonium
Chenopodium album
Montia perfoliata
Lactuca serriola
Chorispora tenella
Sisymbrium altissimum
Dactylis glomerata
Dactylis glomerata
Panicum capillare
Panicum dichotomiflorum
Anaphalis margaritacea
Thlaspi arvense
Amaranthus retroflexus
Agropyron repens
Raphanus raphanistrum
Ambrosia elatior
Rubus spp
Sisymbrium irio
Barbarea vulgaris
Lolium multiflorum
Lolium perenne
Tragopogon spp
Capsella bursa-pastoris
Polygonum pensylvanicum
Rumex acetosella
Rumex angiocarpus
Spergula arvensis
Fragaria virginiana
Descurainia pinnata
Chenopodium ambrosioides
Holcus lanatus
Achillea spp

2.4 to 3.6 Lbs/acre (1.8 lbs – 2.7 lbs ai hexazinone)

Dogbane**
 Meadow-sweet
 Blackberry, trailing
 Laurel, sheep
 Rose, wild**

Apocynum spp
Filipendula ulmaria
Rubus ursinus
Kalmia angustifolia
Rosa spp

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

** 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 (0.25 lb – 1.75 lbs ai hexazinone) 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 (0.25 lb – 1.75 lbs ai hexazinone) 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 (0.25 lb – 1.75 lbs ai hexazinone) 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 (0.25 lb – 1.75 lbs ai hexazinone) 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 (0.25 lb – 1.75 lbs ai hexazinone) 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 (1.0 lb – 1.75 lbs ai hexazinone) 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 (1.75 lbs – 3.6 lbs ai hexazinone) 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
Balsamapple
Castorbean
Crabgrass
Crotalaria
Dallisgrass
Guineagrass
Junglerice
Kao haole*
Moana loa vine*
Morningglory
Oxalis
Popolo
Richardsonium
Vaseygrass

Ageratum conyzoides
Momordica charantia
Ricinus communis
Digitaria spp
Crotalaria spp
Paspalum dilatatum
Panicum maximum
Echinochloa colonum
Leucaena glauca
Canavalia cathartica
Ipomoea spp
Oxalis spp
Solanum sandwicense
Richardsonia spp
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 (3.6 lbs ai hexazinone) per acre per crop.
- Do not apply VELPAR DF CU within 181 days of harvest.
- Do not exceed 2.0 lb VELPAR DF CU (1.5 lbs ai hexazinone) per acre per application when applying by chemigation.
- Do not exceed 2 applications per crop.

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 (Lb/Acre)*
	(Plus surfactant 0.25% by volume)
Coarse Texture	
Sand, loamy sand, sandy loam	2/3 - 1.13
Medium Texture	
Loam, silt loam, silty clay loam	2/3 - 1.13
Fine Texture	
Clay, gray hydromorphic clay	1.13

*2/3 lb Velpar DF CU contains 0.5 lb ai hexazinone. 1.13 lbs VELPAR DF CU contains 0.85 lb ai hexazinone.

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 1.13 pounds (0.85 lb ai hexazinone) 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 - 1.13 pound of VELPAR DF CU (0.5 lb – 0.85 lb ai hexazinone) per acre broadcast in the fall before sugarcane emerges or in the spring before active cane tillering begins. Fall treatments of 2/3 - 1.13 pound (0.5 lb – 0.85 lb ai hexazinone) per acre may be followed by a spring treatment of 2/3 - 1.13 pound (0.5 lb – 0.85 lb ai hexazinone) per acre. Do not apply more than 2 pound (1.5 lbs ai hexazinone) 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 (0.25 – 0.5 lb ai hexazinone) per acre.

For postemergence treatments, apply 1/3 - 2/3 pound of VELPAR DF CU (0.25 – 0.5 lb ai hexazinone) 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 (0.5 lb ai hexazinone) 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 (0.25 – 0.5 lb ai hexazinone) 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 (0.5 lb ai hexazinone) per acre.

Do not apply more than 1 1/3 pound of VELPAR DF CU (1 lb ai hexazinone) per acre per crop season.

TEXAS

Apply 2/3 - 1.13 pounds of VELPAR DF CU (0.5 lb – 0.85 lb ai hexazinone) 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 (1.75 lbs ai hexazinone) per acre per season. Use the following rates according to the different soil textures:

Soils	VELPAR DF CU (Lb/Acre)**	
	Preemergence	Layby
Coarse Texture*		
Sandy loam	1/3	1/3
Medium Texture		
Loam, silt loam	9/10	9/10
Fine Texture		
Clay loam	1.13	1.13

* With at least 2% organic matter

**1/3 lb VELPAR DF CU contains 0.25 lb ai hexazinone. 9/10 lb VELPAR DF CU contains 0.68 lb ai hexazinone. 1.13 lbs VELPAR DF CU contains 0.85 lb ai hexazinone.

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*	<i>Ageratum conyzoides</i>
Alexandergrass	<i>Brachiaria plantaginea</i>
Balsamapple	<i>Momordica charantia</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bermudagrass*	<i>Cynodon dactylon</i>
Burnweed, American (fireweed)	<i>Erechtites hieracifolius</i>
Chickweed, common	<i>Stellaria media</i>
Crabgrass, large	<i>Digitaria sanguinalis</i>
Crabgrass, smooth	<i>Digitaria ischaemum</i>
Crotalaria, fuzzy	<i>Crotalaria incana</i>
Crotalaria, showy	<i>Crotalaria spectabilis</i>
Cuphea, tarweed	<i>Cuphea carthagenensis</i>
Dallisgrass	<i>Paspalum dilatatum</i>
Fingergrass, radiate	<i>Chloris radiata</i>
Fingergrass, swollen	<i>Chloris barbata</i>
Foxtail, bristly	<i>Setaria verticillata</i>
Foxtail, yellow	<i>Setaria lutescens</i>
Geranium, Carolina	<i>Geranium carolinianum</i>
Goosegrass	<i>Elusine indica</i>
Guineagrass	<i>Panicum maximum</i>

Henbit
 Itchgrass*
 Job's-tears
 Johnsongrass (seedling)
 Junglerice
 Lambsquarters, common
 Millet, Texas
 Morningglory, hairy
 Morningglory, three-lobed
 Mustard, wild
 Oxalis
 Paintbrush, Florida's
 Panicum, browntop
 Paspalum, ricegrass
 Paspalum, sour
 Pigweed, redroot
 Pigweed, slender (green)
 Pigweed, smooth
 Popolo
 Purslane, common
 Sandbur
 Sensitive plant (hila hila)
 Signalgrass, broadleaf
 Sowthistle, common
 Spanishneedles
 Sprangletop
 Spurge, prostrate
 Spurge, graceful
 Sunflower
 Vaseygrass
 Waltheria (hila loa)

Lamium amplexicaule
Rottboellia cochinchinensis
Coix lacryma
Sorghum halepense
Echinochloa colonum
Chenopodium album
Panicum texanum
Ipomoea pentaphylla
Ipomoea triloba
Sinapis arvensis
Oxalis spp
Emilia sonchifolia
Panicum fasciculatum
Paspalum orbiculare
Paspalum conjugatum
Amaranthus retroflexus
Amaranthus viridis
Amaranthus chlorostachys
Solanum sandwicense
Portulaca oleracea
Cenchrus spp
Mimosa spp
Brachiaria platyphylla
Sonchus oleraceus
Bidens bipinnata
Leptochloa spp
Euphorbia humistrata
Chamaesyce hypericifolia
Helianthus spp
Paspalum urvillei
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.
- Do not exceed 1.13 pounds VELPAR DF CU (0.85 lbs ai hexazinone) per acre per application.
- Do not exceed 2 applications per year.

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.

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 at 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.

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[EPA Approval Date]