



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

March 8, 2021

Michael Kellogg
Agent
Tessengerlo Kerley, Inc.
c/o Pyxis Regulatory
Consulting, Inc.
4110 136th St. Ct. NW
Gig Harbor, WA 98332

Subject: Notification per PRN 98-10 – Updating master label by correcting PHI for low bush blueberries, and other minor edits.
Product Name: **Velpar L CU**
EPA Registration Number: 61842-47
Application Date: 02/02/2021
Decision Number: 570825

Dear Mr. Kellogg:

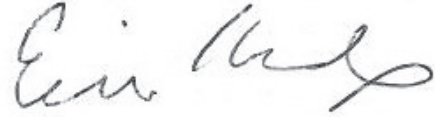
The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

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.

If you have any questions, you may contact please contact Sayed Islam at 703-347-0290 or by email at islam.sayed@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Erik Kraft". The signature is fluid and cursive, with the first name "Erik" being more legible than the last name "Kraft".

Erik Kraft, Product Manager 24
Fungicide and Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

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

HEXAZINONE	GROUP	5	HERBICIDE
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Velpar[®] L CU

[Alternate Brand Name: Velpar[®] L]

Water Dispersible Liquid
Contains 2 Lbs Active Ingredient per Gallon

Active Ingredient	By Weight
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Hexazinone [3-cyclohexyl-6-(dimethylamino) -1-methyl-1,3,5-triazine-2,4(1H,3H)-dione]	25%
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Other Ingredients	75%
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TOTAL 100%

EPA Reg. No. 61842-47 EPA Est. No. _____

Nonrefillable Container

Net: _____

OR

Refillable Container

Net: _____

NOTIFICATION

61842-47

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

03/08/2021

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.)

See [Back] [Side] Panel for First Aid Instructions and [Leaflet] [Booklet] for Complete Precautionary Statements and Directions for Use. [Note to reviewer: Location of additional precautionary statements, directions for use will vary between those listed, depending on container type/size.]

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.

IF ON SKIN:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

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
DANGER! CAUSES EYE DAMAGE.

Corrosive, causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Protective eyewear (goggles, face shield or safety glasses)

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.

Mixers and loaders supporting aerial application to all non-crop sites (including forestry, Christmas trees, pasture/rangeland, bermudagrass/bahiagrass, and uncultivated areas), and mixers, loaders, and applicators using mechanically pressurized hand-guns must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R or P filter; OR a NIOSH-approved powered air purifying respirator with HE filters.

USER SAFETY RECOMMENDATIONS

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

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 or rinsate.

GROUND WATER ADVISORY

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.

NON-TARGET ORGANISM ADVISORY

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.

PHYSICAL AND CHEMICAL HAZARDS

FLAMMABLE. Keep away from heat, sparks, and open flames. Keep container closed.

DIRECTIONS FOR USE

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

VELPAR® L CU 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.

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 (goggles, face shield or safety glasses)

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Use on non-crop sites including industrial turfgrasses are not within the scope of the Worker Protection Standard.

When applied as a spray do not enter or allow worker entry into treated areas until sprays have dried.

MANDATORY SPRAY DRIFT

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 S572.1)
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade 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 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

MANDATORY SPRAY DRIFT

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 S572.1).
- **DO NOT** apply when wind speeds exceed 10 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 manufactures 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.

PRODUCT INFORMATION

VELPAR L CU herbicide is a water-dispersible liquid that is mixed in water and applied as a spray for weed control in certain crops, Christmas trees, forestry site preparation and release areas, and industrial areas. It may also be applied undiluted as a basal soil treatment for brush control in reforestation areas, rangeland, pastures and non-crop areas, or by stem injection for brush control.

VELPAR L CU is an effective general herbicide providing both contact and residual control of many annual, biennial and perennial weeds and woody plants.

VELPAR L CU is noncorrosive to equipment.

Care must be exercised when applying VELPAR L CU near desirable trees or shrubs as they can absorb

VELPAR L CU through roots extending into treated areas.

This product may be applied on agricultural and non-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. It is also permissible to treat marshes, swamps and bogs after water has receded, as well as seasonally dry flood deltas.

Restriction:

- **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 L CU is absorbed through the roots and foliage. Moisture is required to activate VELPAR L 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 or irrigation occurs within 2 weeks after application.

For best results, apply VELPAR L CU preemergence or postemergence when weeds are less than 2 inches in height or diameter. Foliar activity is most effective under conditions of high temperature (above 80°F), high humidity, and good soil moisture. Foliar activity may be reduced when vegetation is dormant, semi-dormant, or under stress.

On herbaceous plants, symptoms usually appear within 2 weeks after application under warm, humid conditions, while 4–6 weeks may be required when weather is cool or dry, or when plants are under stress. If rainfall after application is inadequate to activate VELPAR L 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 or irrigation has carried the herbicide into the root zone during periods of active growth. Defoliation and refoliation may occur, but susceptible plants are killed. In low rainfall areas of the West, it may take up to two years to see the full effect.

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 L CU may be applied by ground equipment and, where permitted, aerial equipment. Use rates, minimum spray gallonage, and other application information are described for the 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.

TANK MIXTURES

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

It is the pesticide user’s responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. If other label instructions conflict with this label do not tank mix the herbicide and/or adjuvant with VELPAR L CU herbicide.

NOTE: When the air temperature is around 32°F, tank mixtures of paraquat dichloride plus VELPAR L CU may form a hard sludge in the spray tank. This effect is most likely to occur when the tank mixture comes into contact with aluminum.

INVASIVE SPECIES MANAGEMENT

This product may be considered for use on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants. Effective EDRR systems address invasions by eradicating the invader where possible and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is advised, a Rapid Response needs to be taken to quickly contain, deny reproduction, and if possible, eliminate the invader. Consult your appropriate state extension service, forest service, or regional multi-disciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

WEED RESISTANCE MANAGMENT

For resistance management, VELPAR L CU is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to VELPAR L 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 L 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 L 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 Tessenlerlo 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

ALFALFA

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

Restrictions (Alfalfa):

- **DO NOT** apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- **DO NOT** exceed 6 pints (1.5 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 6 pints (1.5 lbs ai hexazinone) per acre per year.
- **DO NOT** exceed 1 application per year.

APPLICATION INFORMATION

NON-DORMANT AND SEMI-DORMANT VARIETIES

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

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

In the following states, make a single application of VELPAR L 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	Ohio	West Virginia
Illinois	Michigan	Pennsylvania	Wisconsin
Indiana	Minnesota	Rhode Island	
Iowa	Missouri	Tennessee	
Kentucky	New Hampshire		

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 L 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 like 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:

Soil Texture Description	VELPAR L CU (Pints/Acre)* Percent Organic Matter in Soil		
	<1%	1-5%	>5%
Coarse			
Loamy sand, sandy loam	2-3	2-3	4-6
Medium Texture			
Loam, silt loam, silt, clay loam, sandy clay loam	2-3	3-6	4-6
Fine Texture			
Silty clay loam, sandy clay, silty clay, clay	3-6	3-6	4-6

*2 pints Velpar L CU has 0.5 lb ai hexazinone. 3 pints Velpar L CU has 0.75 lb ai hexazinone. 4 pints Velpar L CU has 1 lb ai hexazinone. 5 pints Velpar L CU has 1.25 lbs ai hexazinone. 6 pints Velpar L CU has 1.5 lbs ai hexazinone.

NOTE:

- In the states of MT, ND, SD, and WY, **DO NOT** exceed a use rate of 4 pints (1 lb ai hexazinone) per acre per application 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 L CU when applied preemergence or early postemergence at the following rates, will control these weed species in alfalfa:

1 - 2 Pints/Acre (0.25 – 0.5 lb ai hexazinone)

Tansymustard *Descurainia pinnata*

2 - 4 Pints/Acre (0.5 lb – 1 lb ai hexazinone)

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

4 - 6 Pints/Acre (1 lb – 1.5 lbs ai hexazinone)

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

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

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

2 - 6 PINTS/ACRE (0.5 lb – 1.5 lbs ai hexazinone)

Crabgrass	<i>Digitaria spp</i>
Fleabane	<i>Conyza spp</i>
Foxtail	<i>Setaria spp.</i>
Jimsonweed	<i>Datura stramonium</i>
Lambsquarters, common	<i>Chenopodium album</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>

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

VELPAR L 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 L 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

Make a single application of VELPAR L 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.

Restrictions (Seed Alfalfa – CA, ID, MT, NV, OR, UT, WA):

- **DO NOT** apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- **DO NOT** use VELPAR L CU on fields with sandy loam or loamy sand soils having less than 1% organic matter.
- **DO NOT** exceed 2 pints (0.5 lb ai hexazinone) per acre per application on fields with sandy loam or loamy sand soils having 1–2% organic matter. For all other soil types, **DO NOT** exceed 6 pints (1.5 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 2 pints (0.5 lb ai hexazinone) per acre per application on seed alfalfa that has been established for only one growing season. For all other applications (except above), **DO NOT** exceed 6 pints (1.5 lbs ai hexazinone) per acre per application.
- Do not exceed 6 pints (1.5 lbs ai hexazinone) per acre per year.
- Maximum number of applications per year is 1.

SEED ALFALFA (WALLA WALLA COUNTY, WA)

VELPAR L 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: 4 to 6 pints per acre

(1 lb – 1.5 lb ai hexazinone)

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

* Suppression

Restrictions (Seed Alfalfa – Walla Walla County, WA):

- **DO NOT** apply within 30 days of harvest (cutting for hay), or feeding of forage or grazing.
- **DO NOT** exceed 6 pints (1.5 lbs ai hexazinone) VELPAR L CU herbicide per acre per application.
- **DO NOT** exceed 6 pints (1.5 lbs ai hexazinone) per acre per year.
- **DO NOT** exceed 1 application per year.

SPRAY EQUIPMENT

Apply VELPAR L 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 per acre. Use at least 5 pints of water per each 1 pint of VELPAR L CU.

CHEMIGATION

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 Rate** 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 L CU at 1 pint (0.25 lb ai) per acre to stubble after cutting, following hay removal, and before regrowth exceeds 2” in height. Apply VELPAR L 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 temperature 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, like 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 L CU and continue agitation.
3. Once the VELPAR L CU is fully dispersed, maintain agitation and continue filling tank with water.

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 L CU spray mixture within 48 hours of mixing to avoid product degradation.

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.
- 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.
- **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 including residential areas, labor camps, businesses, daycare centers, hospitals, in-patient clinics, nursing homes, or any public areas including schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public including 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 needs to 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)

- 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 3 pints per acre.
- Root crops including potatoes, sugarbeets, radish and carrots may be planted 12 months after last treatment, provided the use rate does not exceed 2 pints (0.5 lb ai hexazinone) per acre. Sites with use rates higher than 2 pints (0.5 lb ai hexazinone) per acre must not be replanted to any root crop within 2 years after application of VELPAR L 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.

Restrictions (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
- 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.

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.

BLUEBERRY

HIGH BUSH BLUEBERRIES

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

APPLICATION INFORMATION

VELPAR L CU may be applied to high bush blueberries that have been established for 3 or more years. Apply VELPAR L 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 (High Bush Blueberries):

- Application to blueberry foliage will result in crop injury.
- Since the effect of VELPAR L 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.

Restrictions (High Bush Blueberries):

- **DO NOT** apply through any type of irrigation system.
- **DO NOT** exceed 8 pints VELPAR L CU (2 lbs ai hexazinone) per acre per year.
- **DO NOT** apply within 50 days of harvest.
- **DO NOT** apply to flooded field with standing water.
- **DO NOT** exceed 8 pints VELPAR L CU (2 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

USE RATES (Pints/Acre)

HIGH BUSH BLUEBERRIES

<u>Soil texture</u>	<u>less than or equal to 3% organic matter</u>	<u>greater than 3% organic matter</u>
Coarse loamy sand, sandy loam (50-85% sand)	4	5
Medium loam, silt loam, silt, clay loam, sandy clay loam		8
Fine silty clay loam, clay loam, sandy clay, silty clay, clay	4 - 6*	8

*Use the higher rate as the soil organic matter approaches 3%. 4 pints VELPAR L CU has 1 lb ai hexazinone. 5 pints VELPAR L CU has 1.25 lbs ai hexazinone. 6 pints VELPAR L CU has 1.5 lbs ai hexazinone. 8 pints VELPAR L CU has 2 lbs ai hexazinone.

LOW BUSH BLUEBERRIES

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

APPLICATION INFORMATION

VELPAR L 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 (Low Bush Blueberries):

- Application to blueberry foliage will result in crop injury.
- Since the effect of VELPAR L 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.

Restrictions (Low Bush 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 12 pints VELPAR L CU (3 lbs ai hexazinone) per acre per year.
- **DO NOT** exceed 8 pints (2 lbs ai hexazinone) per acre per year if field has been treated with hexazinone within the past 8 years.
- **DO NOT** exceed 12 pints (3 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

USE RATES (Pints/Acre)***

LOW 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)	4	5
Medium loam, silt loam, silt, clay loam, sandy clay loam	6	
Fine silty clay loam, clay loam, sandy clay, silty clay, clay	4 - 8*	8 -12**

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

**Use the higher rate for harder to control species.

***4 pints VELPAR L CU has 1 lb ai hexazinone. 5 pints VELPAR L CU has 1.25 lbs ai hexazinone. 6 pints VELPAR L CU has 1.5 lbs ai hexazinone. 8 pints VELPAR L CU has 2 lbs ai hexazinone. 12 pints VELPAR L CU has 3 lbs ai hexazinone.

WEEDS CONTROLLED

VELPAR L CU will control or suppress the following weed species in High and Low Bush Blueberry crops:

Aster, heath*	<i>Aster ericoides</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Blackberry* (briar)	<i>Rubus spp</i>
Bluegrass,	
Kentucky (perennial)*	<i>Poa pratensis</i>
Brome, downy (cheatgrass)	<i>Bromus tectorum</i>
Broomsedge*	<i>Andropogon virginicus</i>
Carrot, wild*	<i>Daucus carota</i>
Catchfly, English	<i>Silene gallica</i>
Chamomile, mayweed	<i>Anthemis cotula</i>
Cherry, wild	<i>Prunus serotia</i>
Chickweed, common	<i>Stellaria media</i>
Cinquefoil	<i>Potentilla spp</i>
Cockle, white*	<i>Melandrium album</i>
Dandelion, common*	<i>Taraxacum officinale</i>
Dandelion, false* (spotted catsear)	<i>Hypochaeris radicata</i>
Daisy, oxeye	<i>Chrysanthemum leucanthemum</i>
Dock, curly*	<i>Rumex crispus</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Fescue*	<i>Festuca spp</i>
Fiddleneck, tarweed	<i>Amsinckia lycopsoides</i>
Filaree	<i>Erodium spp</i>
Fireweed*(willowweed)	<i>Epilobium angustifolium</i>
Fleabane, flax-leaved	<i>Conyza bonariensis</i>
Flixweed	<i>Descurainia sophia</i>
Foxtail, yellow	<i>Setaria lutescens</i>
Goldenrod	<i>Solidago spp</i>
Groundsel, common	<i>Senecio vulgaris</i>

Hawkweed	<i>Hieracium spp</i>
Horseweed/marestail	<i>Conyza canadensis</i>
Jimsonweed	<i>Datura stramonium</i>
Lambsquarters, common	<i>Chenopodium album</i>
Lettuce, Miner's	<i>Montia perfoliata</i>
Lettuce, prickly*	<i>Lactuca serriola</i>
Mustard, blue	<i>Chorispora tenella</i>
Mustard, Jim Hill (tumble)	<i>Sisymbrium altissimum</i>
Orchardgrass *	<i>Dactylis glomerata</i>
Orchardgrass (seedling)	<i>Dactylis glomerata</i>
Panicgrass (witchgrass)	<i>Panicum capillare</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>
Pearly everlasting	<i>Anaphalis margaritacea</i>
Pennycress, field	<i>Thlaspi arvense</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>
Quackgrass	<i>Agropyron repens</i>
Radish, wild	<i>Raphanus raphanistrum</i>
Ragweed, common	<i>Ambrosia elatior</i>
Raspberry* (briar)	<i>Rubus spp</i>
Rocket, London	<i>Sisymbrium irio</i>
Rocket, common yellow	<i>Barbarea vulgaris</i>
Ryegrass, Italian (annual)	<i>Lolium multiflorum</i>
Ryegrass, perennial*	<i>Lolium perenne</i>
Salsify	<i>Tragopogon spp</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Sorrel, red	<i>Rumex acetosella</i>
Sorrel, sheep	<i>Rumex angiocarpus</i>
Spurry, corn	<i>Spergula arvensis</i>
Strawberry, wild	<i>Fragaria virginiana</i>
Tansymustard (pinnate)	<i>Descurainia pinnata</i>
Tea, Mexican*	<i>Chenopodium ambrosioides</i>
Velvetgrass	<i>Holcus lanatus</i>
Yarrow	<i>Achillea spp</i>

8 to 12 Pints/Acre (2 lbs to 3 lbs ai hexazinone)

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

* 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.

CHRISTMAS TREES

VELPAR L CU is labeled for control of certain weeds where the following species are grown:

Fir, Douglas (western US only)	<i>Pseudotsuga menziesii</i>
Fir, Fraser	<i>Abies fraseri</i>
Fir, grand	<i>Abies grandis</i>
Fir, noble	<i>Abies procera</i>
Pine, Austrian	<i>Pinus nigra</i>
Pine, loblolly	<i>Pinus taeda</i>
Pine, ponderosa	<i>Pinus ponderosa</i>
Pine, Scotch	<i>Pinus sylvestris</i>
Spruce, Sitka	<i>Picea sitchensis</i>

Unless otherwise directed in separately published instructions, do not use VELPAR L CU on Christmas trees in the following states:

Alabama	Louisiana	New Jersey	South Carolina
Arkansas	Maine	New York	Texas
Connecticut	Maryland	North Carolina	Vermont
Delaware	Massachusetts	Pennsylvania	Virginia
Georgia	Mississippi	Rhode Island	West Virginia
Florida	New Hampshire		

APPLICATION INFORMATION

EASTERN US

Apply VELPAR L CU as a broadcast spray in the spring prior to bud break. If application is made after bud break, use directional spray equipment to prevent contact with foliage.

WESTERN US

Areas of greater than 20 inches annual rainfall – Apply VELPAR L CU as a broadcast spray in the spring prior to conifer bud break. If application is made after bud break, use directional spray equipment to prevent contact with foliage.

Areas of less than 20 inches annual rainfall – Apply VELPAR L CU in the fall before the soil freezes or in the spring after snow cover melts, but before conifer bud break occurs.

USE RATES

The rates listed below are for broadcast application. For band application, use proportionately less; for example, use 1/2 of the broadcast rates when treating a 3-foot band where row spacing is 6 feet. Use the higher end of the rate range on the heavier soil type.

Soils	VELPAR L CU (Pints/Acre)	
	First Year Plantings	Established Trees
Coarse Texture Loamy sand, sandy loam (50-85% sand)	4 (1 lb ai hexazinone)	4 – 5 (1-1.25 lbs ai hexazinone)
Medium Texture Loam, silt loam, silt, clay loam, sandy clay loam	4 – 5 (1-1.25 lbs ai hexazinone)	5 – 7 (1.25-1.75 lbs ai hexazinone)
Fine Texture Silty clay loam, clay loam, sandy clay, silty clay, clay	5 – 6 (1.25-1.5 lbs ai hexazinone)	7 – 8 (1.75-2 lbs ai hexazinone)

First year plantings - Transplant stock must be 2 years old or older (1 year old for loblolly pine). Apply VELPAR L CU only if rainfall has settled the soil around the base and root systems of the transplants.

Established trees - Trees that have been planted in the plantation for 1 year or more.

For weeds controlled see Herbaceous Plants in the Forestry Plants Controlled Section.

SPRAY EQUIPMENT

VELPAR L CU may be applied by ground equipment or by air. Select a spray volume that will ensure a thorough and uniform application. Apply a minimum of 5 gallons per acre by air and a minimum of 10 gallons per acre by ground equipment.

USE PRECAUTIONS - CHRISTMAS TREES

- Weed control results from spring applications depend on sufficient moisture to activate VELPAR L CU.
- Poor weed and brush control may result from the following:
 - Heavy duff or slash present at the time of application.
 - Use on poorly drained sites.
 - Applications made when soil is saturated with water and rain is imminent within 24 hours.
 - Applications to soils high in organic matter (greater than 5%).
- Injury may occur when VELPAR L CU is used on the following:
 - Trees that show poor vigor, insect damage, disease, winter injury, or other stress conditions.
 - Any soil containing less than 1% organic matter
 - Loamy sand or sandy loam with less than 2% organic matter (except Jeffrey Pine and Ponderosa Pine).
 - Foliage after bud break.
 - Gravelly or rocky soils, exposed subsoils, clay knobs, sand, or sandy soil with 85% or more sand.

USE RESTRICTIONS - CHRISTMAS TREES

- **DO NOT** use VELPAR L CU in nurseries, seed beds, or ornamental plantings.
- **DO NOT** add a surfactant in applications over the top of conifers.

- **DO NOT** cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application of VELPAR L CU at broadcast rates exceeding 4.5 pints (1.125 lbs ai hexazinone) per acre.
- Livestock may be grazed immediately following a broadcast application of VELPAR L CU at rates of 4.5 pints (1.125 lbs ai hexazinone) per acre or less. **DO NOT** feed livestock treated vegetation for 38 days following application. Treated vegetation may be cut, dried, and fed after 38 days.
- **DO NOT** apply more than 8 pints (2 lbs ai hexazinone) per acre per year.
- **DO NOT** apply more than 8 pints (2 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

FORESTRY

SITE PREPARATION

VELPAR L CU is labeled for weed and brush control in areas where the following species are grown:

EASTERN US AND LAKE STATES	
Fir, balsam	<i>Abies balsamea</i>
Pine, Austrian	<i>Pinus negra</i>
Pine, loblolly	<i>Pinus taeda</i>
Pine, longleaf	<i>Pinus palustris</i>
Pine, ponderosa	<i>Pinus ponderosa</i>
Pine, red	<i>Pinus resinosa</i>
Pine, Scotch	<i>Pinus sylvestris</i>
Pine, shortleaf	<i>Pinus echinata</i>
Pine, slash	<i>Pinus elliottii</i>
Pine, Virginia	<i>Pinus virginiana</i>
Spruce, black	<i>Picea mariana</i>
Spruce, red	<i>Picea rubens</i>
Spruce, white	<i>Picea glauca</i>
WESTERN US	
Fir, Douglas	<i>Pseudotsuga menziesii</i>
Fir, grand	<i>Abies grandis</i>
Fir, Noble	<i>Abies procera</i>
Fir, white	<i>Abies concolor</i>
Pine, Jeffrey	<i>Pinus jeffreyi</i>
Pine, lodgepole	<i>Pinus contorta</i>
Pine, ponderosa	<i>Pinus ponderosa</i>
Spruce, blue	<i>Picea pungens</i>
Spruce, Engelman	<i>Picea engelmannii</i>
Spruce, Sitka	<i>Picea sitchensis</i>

BROADCAST APPLICATION

EASTERN US

Apply VELPAR L CU from early spring to early summer after hardwoods have broken bud and before the foliage has hardened off.

Soil Texture Description	VELPAR L CU (Quarts/Acre) Eastern US
Coarse Sand, Loamy sand, sandy loam	4 – 6 (2-3 lbs ai hexazinone)
Medium Loam, silt loam, sandy clay loam	6 – 8 (3-4 lbs ai hexazinone)
Fine Silty clay loam, clay loam, sandy clay, silt, silty clay, clay	8 – 10 (4-5 lbs ai hexazinone)
The rates listed are for broadcast application. Use the lower rates on coarse textured soils and soils low in organic matter. Use the higher rates where weeds identified in this label as “suppression” predominate.	

WESTERN US

For **SITE PREPARATION**, VELPAR L CU may be applied at 2 to 6 quarts (1-3 lbs ai hexazinone) per acre. Use the lower rates on coarse textured soils and soils low in organic matter. Use the higher rates on fine textured soils and soils high in organic matter. Use the higher rates where weeds identified in this label as “suppression” predominate.

In areas where other conifer species may be mixed in with the conifers listed above, VELPAR L CU may be applied if the user has prior experience with VELPAR L CU on the other conifer species. With no prior experience, it is advised that either a small area of plantings be tested for conifer safety prior to treating larger areas or make no application of VELPAR L CU in these areas. Conifer species that are sensitive to VELPAR L CU, including, sugar pine and western larch, require 18 months before interplanting on treated sites.

Applications made to shelter wood sites may also result in mortality to over-story conifers. Factors that may influence conifer sensitivity in these sites could include application rate, conifer species, soil characteristics, uniformity of spray distribution across the treatment swath and environmental stress.

Rain Belt (areas of high spring rainfall): For best results, apply in late winter or spring when weeds and brush are actively growing.

Snow Belt (areas of low spring rainfall): For best results, apply in the fall before soil freezes, or in the spring after snow cover melts in anticipation of rainfall. Weed and brush control results from spring applications will be dependent on sufficient rainfall following application to activate VELPAR L CU.

BURNING

Within several weeks after VELPAR L CU activation by rainfall, affected vegetation may be burned, if desired. This burn may further enhance control of vegetation. Burn the vegetation only after any residual stand is completely defoliated, at least twice, allowing for sufficient root uptake of VELPAR L CU.

SPRAY EQUIPMENT

When applied as a liquid spray using water as the carrier, VELPAR L CU may be applied by ground equipment or by air (helicopter only).

For ground application, use enough water for thorough coverage, usually a minimum of 25 gallons per acre. For aerial applications, use at least 5 gallons of water per acre and at least 5 gallons of water for every 1 gallon (2 lbs. ai hexazinone) of VELPAR L CU.

GRID APPLICATION

Apply undiluted VELPAR L CU directly to the soil surface in a grid pattern using an exact delivery handgun applicator. This equipment delivers a thin stream of a predetermined volume. VELPAR L CU must be applied during the period from hardwood bud break to early summer.

Selection of the rate per acre and grid pattern will depend on soil texture and woody plant composition. Use the lower rates on coarse textured soils and when the major component of the hardwoods are susceptible species. Use the high rates on fine-textured soils and where weeds identified in the label as “suppression” predominate.

Application Patterns and Rates For Undiluted Grid Application			
	Milliliters/Spot	Grid (Ft)	Quarts/Acre
Coarse	0.6	3 X 3	3 (1.5 lbs ai hexazinone)
	2.0	4 X 4	6 (3 lbs ai hexazinone)
	3.1	4 X 6	6 (3 lbs ai hexazinone)
Medium/Fine	1.6	3 X 3	8 (4 lbs ai hexazinone)
	2.8	4 X 4	8 (4 lbs ai hexazinone)
	3.5	4 X 4	10 (5 lbs ai hexazinone)
	5.2	4 X 6	10 (5 lbs ai hexazinone)

SINGLE STEM TREATMENT

SOIL APPLIED BASAL TREATMENT

Apply undiluted VELPAR L CU to the soil with an exact delivery handgun applicator. Apply at the rate of 2–4 ml for each inch of stem diameter at breast height. Direct the treatment to the soil within 3 feet of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of VELPAR L CU is needed per stem, make application on opposite sides of the stem.

For multi-stemmed and low-growing brush that have stem diameters that are difficult to determine, apply VELPAR L CU at the rate of 2–4 ml per 3 feet of canopy width. For tall, slender (columnar) brush types, apply 4–8 ml per 3 feet of height. Base the rate on whichever canopy dimension is greater (width or height).

When treating brush that requires more than a single 4 ml application of VELPAR L CU, apply subsequent applications equally spaced around the plant. If treating brush on sloped sites, apply most of the VELPAR L CU on the uphill side of the stem. If treating resprouts from brush disturbed by cutting or shredding, the rate of application must be proportional to the original tree size, not just the small regrowth of sprouts.

STEM INJECTION

No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Inject 1 ml of undiluted VELPAR L CU through the bark of undesirable trees. Make injections at 4 inch intervals around the circumference of the tree. When using tubular injection equipment, inject near the ground level. When using the “Hypo-Hatchet” Tree Injector or a similar device, inject at waist height. Best results if treatments are made in the summer. Woody species controlled include black cherry, oaks, and sweetgum.

USE PRECAUTIONS - SITE PREPARATION

- Where burning is desired, burn the vegetation only after any residual brush has completely defoliated, at least twice, allowing for sufficient root uptake of VELPAR L CU.
- Following harvest, allow sufficient time for stumps and injured trees to adequately resprout before applying VELPAR L CU.

USE RESTRICTIONS - SITE PREPARATION

- **DO NOT** apply more than 4.5 pints of VELPAR L CU (1.125 lbs ai hexazinone) per gallon when using mechanically pressurized handgun equipment. Does not apply to backpack sprayer applications.
- **DO NOT** apply more than 20 pints (5 lbs ai hexazinone) per acre per year.
- **DO NOT** apply more than 20 pints (5 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

RELEASE – WOODY BRUSH CONTROL

VELPAR L CU is labeled for conifer release where the following species are grown:

EASTERN US AND LAKE STATES	
Fir, balsam	<i>Abies balsamea</i>
Pine, loblolly	<i>Pinus taeda</i>
Pine, longleaf	<i>Pinus palustris</i>
Pine, red	<i>Pinus resinosa</i>
Pine, shortleaf	<i>Pinus echinata</i>
Pine, slash	<i>Pinus ellioti</i>
Pine, Virginia	<i>Pinus virginiana</i>
Spruce, black	<i>Picea mariana</i>
Spruce, Norway	<i>Picea abies</i>
Spruce, red	<i>Picea rubens</i>
Spruce, white	<i>Picea glauca</i>
WESTERN US	
Fir, Douglas	<i>Pseudotsuga menziesii</i>
Fir, grand	<i>Abies grandis</i>
Fir, Noble	<i>Abies procera</i>
Fir, white	<i>Abies concolor</i>
Hemlock, Western	<i>Tsuga heterophylla</i>
Pine, Jeffrey	<i>Pinus jeffreyi</i>
Pine, lodgepole	<i>Pinus contorta</i>
Pine, ponderosa	<i>Pinus ponderosa</i>
Spruce, blue	<i>Picea pungens</i>
Spruce, Englemann	<i>Picea englemannii</i>
Spruce, Sitka	<i>Picea sitchensis</i>

BROADCAST APPLICATION

EASTERN US

Apply VELPAR L CU from early spring to early summer after hardwoods have broken bud and before full leaf expansion.

Applications made over the top of pines may result in excessive pine injury under conditions of high humidity and temperature (80 degrees F).

Crop Species	Soil Texture Description	VELPAR L CU (Quarts/Acre) Established Trees
Loblolly pine Longleaf pine Shortleaf pine Virginia pine Slash pine	Loamy sand, sandy loam	2-3 (1-1.5 lbs ai hexazinone)
	Loam, silt loam, silt, sandy clay loam	2-4 (1-2 lbs ai hexazinone)
	Silty clay loam, clay loam, sandy clay, silty clay, clay	4.5-6 (2.25-3 lbs ai hexazinone)
Red pine	Loamy sand, sandy loam	2-4 (1-2 lbs ai hexazinone)
	Loam, silt loam, silt, sandy clay loam	4-6 (2-3 lbs ai hexazinone)
	Silty clay loam, clay loam, sandy clay, silty clay, clay	6-8 (3-4 lbs ai hexazinone)

Use the higher rate for the harder to control (*suppression) species in the PLANTS CONTROLLED section.

Established Trees

- 4 years of age from transplanting on coarse-textured soils
- 3 years of age from transplanting on medium-textured soils
- 2 years of age from transplanting for Red Pine

WESTERN US

Rainbelt (areas of high spring rainfall): For best results, apply in late winter or spring when brush is actively growing, but prior to conifer budbreak. Dormant conifer trees are less susceptible to injury. Applications where the spray comes into direct contact with conifers after dormancy break in the spring or before the final resting bud has hardened in the fall may severely injure or kill the trees.

Snowbelt (areas of low spring rainfall): For best results, apply in the fall before soil freezes and after the final resting bud has hardened on the conifers. Alternatively, spring applications may be made after snow cover melts in anticipation of rainfall prior to conifer budbreak. Brush control results from spring treatments will be dependent on sufficient rainfall following application to activate VELPAR L CU.

Application rates by soil type for VELPAR L CU

Soil Texture Description	VELPAR L CU (Quarts/Acre)
Loamy sand, sandy loam	2-4.5 (1-2.25 lbs ai hexazinone)
Loam, silt loam, sandy clay loam	3.5-6 (1.75-3 lbs ai hexazinone)
Silt, silty clay loam, clay loam, sandy clay, silty clay, clay	5-6 (2.5-3 lbs ai hexazinone)

Use the higher rate range for the harder to control (*suppression) species in the PLANTS CONTROLLED section.

For first year plantings utilizing bare root stock, treat only transplant stock that is 2 years old (2-0, 1-1) or older, except (1-0) for Ponderosa and Jeffrey pines. Apply VELPAR L CU only if rainfall has settled the soil around the base and root systems of the transplants.

SPRAY EQUIPMENT

When applied as a liquid spray using water as the carrier, VELPAR L CU may be applied by ground equipment or by air (helicopter only).

For ground application, use enough water for thorough coverage, usually a minimum of 25 gallons per acre. For aerial applications, use at least 5 gallons of water per acre and at least 5 gallons of water for every 1 gallon (2 lbs. ai hexazinone) of VELPAR L CU.

GRID APPLICATION

Apply undiluted VELPAR L CU directly to the soil surface in a grid pattern using an exact delivery handgun applicator. This equipment delivers a thin stream of a predetermined volume when triggered. Apply VELPAR L CU during the period from

hardwood bud break to early summer.

Selection of the rate per acre and grid pattern depends on soil texture and woody plant composition. Use the lower rates on coarse textured soils and when the major component of the hardwoods are susceptible species. Use the high rates on fine-textured soils and where weeds identified in this label as “partial control or suppression” predominate.

Application Patterns and Rates For Undiluted VELPAR L CU			
	<i>Milliliters/Spot</i>	<i>Grid (Ft)</i>	<i>Quarts/Acre</i>
Coarse	0.5	3 X 4	2* (1 lb ai hexazinone)
	1.2	3 X 6	3 (1.5 lbs ai hexazinone)
	2.1	4 X 6	4 (2 lbs ai hexazinone)
Medium/Fine	1.2	3 X 3	6 (3 lbs ai hexazinone)
	2.3	3 X 6	6 (3 lbs ai hexazinone)
	1.6	3 X 3	8 (4 lbs ai hexazinone)
	3.1	3 X 6	8 (4 lbs ai hexazinone)

*Use on deep sands with pines four years of age or older.

SINGLE STEM TREATMENT

SOIL APPLIED BASAL TREATMENT

Apply undiluted VELPAR L CU to the soil with an exact delivery handgun applicator. Apply at the rate of 2–4 ml for each inch of stem diameter at breast height. Direct the treatment to the soil within 3 feet of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of VELPAR L CU is needed per stem, make application on opposite sides of the stem.

For multi-stemmed and low-growing brush that have stem diameters that are difficult to determine, apply VELPAR L CU at the rate of 2–4 ml per 3 feet of canopy width. For tall, slender (columnar) brush types, apply 4–8 ml per 3 feet of height. Base rate on whichever canopy dimension is greater (width or height).

When treating brush that requires more than a single 4 ml application of VELPAR L CU, apply subsequent applications equally spaced around the plant. If treating brush on sloped sites, apply most of the VELPAR L CU on the uphill side of the stem. If treating resprouts from brush disturbed by cutting or shredding, the rate of application must be proportional to the original tree size, not just the small regrowth of sprouts.

STEM INJECTION

No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

Inject 1 ml of undiluted VELPAR L CU through the bark of undesirable trees. Make injections at 4 inch intervals around the circumference of the tree. When using tubular injection equipment, inject VELPAR L CU near the ground level. When using the “Hypo-Hatchet” Tree Injector or a similar device, inject at waist height. Best results if treatments are made in the summer. Woody species controlled include black cherry, oaks, and sweetgum.

USE PRECAUTIONS FOR RELEASE – WOODY BRUSH CONTROL

- Application of VELPAR L CU basal soil spot treatments closer than 36 inches to conifer seedlings in their first season or directly up slope from these seedlings may result in injury or mortality.
- Use undiluted single stem treatments in crop trees that are less than one year from planting or that have been planted for more than three years. Injury may result from use in two and three year old crop trees where root growth is extensive but hardiness is lacking.

USE RESTRICTIONS FOR RELEASE – WOODY BRUSH CONTROL

- **DO NOT** apply more than 4.5 pints of VELPAR L CU (1.125 lbs ai hexazinone) per gallon when using mechanically pressurized handgun equipment. Does not apply to backpack sprayer applications.
- **DO NOT** apply more than 20 pints (5 lbs ai hexazinone) per acre per year.
- **DO NOT** apply more than 20 pints (5 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

RELEASE- HERBACEOUS WEED CONTROL

VELPAR L CU is labeled for controlling herbaceous weeds where these pine species are grown:

EASTERN US			
Loblolly pine	Longleaf pine	Red pine	Slash pine

WESTERN US			
Blue spruce	Grand fir	Noble fir	Western hemlock
Douglas fir	Jeffrey pine	Ponderosa pine	White fir
Engleman spruce	Lodgepole pine	Sitka spruce	

APPLICATION INFORMATION

EASTERN US

Apply VELPAR L CU as a broadcast or banded spray in the spring prior to conifer bud break to lessen conifer injury potential.

VELPAR L CU (Pints/Acre)		
Soil Texture Description	First Year Plantings	Established Trees
Loamy sand, sandy loam (50-85% sand)	4 (1 lb ai hexazinone)	4-5 (1-1.25 lb ai hexazinone)
Loam, silt loam, silt, sandy clay loam	4-5 (1-1.25 lb ai hexazinone)	5-7 (1.25-1.75 lb ai hexazinone)
Silty clay loam, clay loam, sandy clay, silty clay, clay	5-6 (1.25-1.5 lb ai hexazinone)	7-8 (1.75-2 lb ai hexazinone)

The rates listed are for broadcast application. For band application, use proportionately less. For example, use 1/2 of the broadcast rates when treating a 3-foot band where row spacing is 6 feet. Use the higher rate range for the harder to control (*Suppression) weeds listed in the weeds control section.

WESTERN US

Rainbelt (areas of high spring rainfall): For best results, apply as a broadcast or banded spray in the late winter or spring when weeds are actively growing, but prior to conifer bud break. If application is made after conifer bud break, use directional spray equipment to prevent contact with conifer foliage, as injury may result.

Snowbelt (areas of low spring rainfall): For best results, apply as a broadcast or banded spray in the fall before soil freezes and after the final resting bud has hardened on the conifers. Alternatively, spring applications may be made after snow cover melts in anticipation of rainfall prior to conifer budbreak. Weed control results from spring treatments will be dependent on sufficient rainfall following application to activate VELPAR L CU.

WESTERN US

Refer to rates listed for the Western US in the BROADCAST APPLICATION section under Release – Woody Brush Control. The rates listed are for broadcast application. For band application, use proportionately less. For example, use 1/2 of the broadcast rates when treating a 3-foot band where row spacing is 6 feet. Use the higher rate range for the harder to control (*Suppression) weeds listed in weeds control section.

USE RESTRICTIONS FOR RELEASE – HERBACEOUS WEED CONTROL

- **DO NOT** apply more than 8 pints (2 lbs ai hexazinone) per acre per year.
- **DO NOT** apply more than 8 pints (2 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

PLANTS CONTROLLED

HERBACEOUS PLANTS	
Asters	<i>Aster</i> spp
Aster, heath*	<i>Aster ericoides</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bentgrass	<i>Agrostis</i> spp
Bluegrass, annual	<i>Poa annua</i>
Bromegrass	<i>Bromus</i> spp
Burnweed*	<i>Erechtites hieraciifolius</i>
Carrot, wild	<i>Daucus carota</i>
Crabgrass*	<i>Digitaria</i> spp
Daisy, oxeye	<i>Chrysanthemum leucanthemum</i>
Dandelion, common*	<i>Taraxacum officinale</i>

Dandelion, false* (spotted catsear)	<i>Hypochaeris radicata</i>
Dock, curly*	<i>Rumex crispus</i>
Elksedge	<i>Carex geyeri</i>
Fescue*	<i>Festuca</i> spp
Fireweed*(willowweed)	<i>Epilobium angustifolium</i>
Fleabane	<i>Conyza</i> spp
Foxtail	<i>Setaria</i> spp
Goldenrod*	<i>Solidago</i> spp
Groundsel, common	<i>Senecio vulgaris</i>
Horseweed/marestail	<i>Conyza canadensis</i>
Mullein, common**	<i>Verbascum thapsus</i>
Orchardgrass *	<i>Dactylis glomerata</i>
Panicums	<i>Panicum</i> spp
Pinegrass	<i>Calamagrostis rubescens</i>
Quackgrass*	<i>Agropyron repens</i>
Ragweed, common	<i>Ambrosia elatior</i>
Ryegrass, Italian (annual)	<i>Lolium multiflorum</i>
Ryegrass, perennial*	<i>Lolium perenne</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Squawcarpet	<i>Ceanothus prostratus</i>
Thistle, Canada*	<i>Cirsium arvense</i>
Velvetgrass, common	<i>Holcus lanatus</i>
** For western US site preparation, apply at 6 quarts (3 lbs ai hexazinone) per acre.	
WOODY PLANTS	
Ash	<i>Fraxinus</i> spp
Aspen, big tooth	<i>Populus grandidentata</i>
Aspen, trembling	<i>Populus tremuloides</i>
Birch	<i>Betula</i> spp
Blackgum	<i>Nyssa sylvatica</i>
Brambles	<i>Rubus</i> spp
Cherry, black	<i>Prunus serotina</i>
Cherry, pin	<i>Prunus pennsylvanica</i>
Deerbrush	<i>Ceanothus integerrimus</i>
Dogwood, flowering*	<i>Cornus florida</i>
Elm	<i>Ulmus</i> spp
Elder, box	
Hawthorn	<i>Crataegus</i> spp
Hazel	<i>Corylus</i> spp
Hickory	<i>Carya</i> spp
Honeysuckle*	<i>Lonicera</i> spp
Manzanita, Greenleaf	<i>Arctostaphylos patula</i>
Maple, red*	<i>Acer rubrum</i>
Oaks	<i>Quercus</i> spp
Poplar, balsam	<i>Populus balsamifera</i>
Snowbrush (varnishleaf)	<i>Ceanothus velutinus</i>
Sourwood*	<i>Oxydendrum arboretum</i>
Sweetgum	<i>Liquidambar</i> spp
Willows	<i>Salix</i> spp
*Suppression is a visible reduction in plant competition (reduced population and/or vigor) as compared to an untreated area. Degree of suppression will vary with rate applied, size of plants at application, and environmental conditions following treatment. Species indicated above, especially resprouts of these species, may require a follow up treatment for acceptable control. Burning, as a follow up treatment, will enhance control of resprouts.	

USE PRECAUTIONS - FORESTRY

- On tracts of land where various soil types are present and VELPAR L CU rate selection is difficult, conifer damage or less-than-expected vegetation suppression may occur due to the different rates required for various soil types.
- Poor weed and brush control may result from the following:
 - Heavy duff or slash present at time of application
 - Use on poorly drained sites

- Applications made when the soil is saturated with water and rain is imminent within 24 hours
- Applications to soils high in organic matter (greater than 5%)
- Following harvest, allow stumps and injured trees sufficient time to adequately resprout before applying VELPAR L CU.
- Where burning is desired, burn vegetation after any brush has completely defoliated, at least twice, allowing for sufficient root uptake of VELPAR L CU.
- Weed control results from spring applications depend on sufficient moisture to activate VELPAR L CU.
- Crop injury may occur when VELPAR L CU is used:
 - On trees that show poor vigor, insect damage, disease, winter injury, or other stress conditions
 - On any soil containing less than 1% organic matter
 - On loamy sand or sandy loam with less than 2% organic matter, except Jeffrey pine and Ponderosa pine
 - On conifer foliage after conifer bud break
 - On gravelly or rocky soils, exposed subsoils, clay knobs, sand, or sandy soil with 85% or more sand
 - On crop species not listed on this label

USE RESTRICTIONS - FORESTRY

- When using a mechanically-pressurized handgun, reduce rate to 4.5 pints VELPAR L CU (1.125 lbs ai) per gallon.
- **DO NOT** use VELPAR L CU in nurseries, seedbeds, or ornamental plantings.
- **DO NOT** use VELPAR L CU on frozen soils; use in spring after snow melt.
- Leave treated soil undisturbed to reduce the potential for VELPAR L CU movement by soil erosion due to wind or water.
- **DO NOT** add a surfactant in applications over the top of conifers.
- When applying VELPAR L CU after transplanting, wait until rainfall has settled the soil around the base and root systems of the transplants before making the treatment.
- Livestock may be grazed immediately following a broadcast application of VELPAR L CU at rates of 4.5 pints (1.125 lbs ai hexazinone) per acre or less, and treated vegetation may be cut, dried, and fed after 38 days.
- **DO NOT** cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application of VELPAR L CU at broadcast rates exceeding 4.5 pints (1.125 lbs. ai hexazinone) per acre.
- **DO NOT** apply more than 20 pints (5 lbs ai hexazinone) per acre per year.
- **DO NOT** apply more than 20 pints (5 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

YELLOW POPLAR PLANTINGS

VELPAR L CU is labeled for the control of herbaceous weeds in the establishment of yellow poplar plantations. Applications may be made over the top of planted seedlings after the soil has settled around the root systems but before the seedlings have broken dormancy (bud break). A subsequent application may be made before dormancy break in the Spring of the second year.

Apply 4 to 6 pints (1-1.5 lbs ai hexazinone) per acre of VELPAR L CU as specified in "RELEASE—HERBACEOUS WEED CONTROL", "Application Information Eastern U.S." Follow the label instructions regarding varying the application rate by soil texture.

For ground application, use enough water for thorough coverage, usually a minimum of 25 gallons per acre. For aerial applications, use at least 5 gallons of water per acre and at least 5 gallons of water for every 1 gallon (2 lbs ai hexazinone) of VELPAR L CU.

For broader spectrum control VELPAR L CU may be tank mixed with metsulfuron.

Add metsulfuron at a rate of 1/2 ounce per acre to a tank mix with the prescribed rate of VELPAR L CU.

USE PRECAUTIONS - YELLOW POPLAR PLANTINGS

- Applications of VELPAR L CU and tank mixes of VELPAR L CU and metsulfuron made to yellow poplar seedlings that are suffering from loss of vigor caused by insects, disease, drought, winter damage, animal damage, excessive soil moisture, planting shock or other stresses may injure or kill the seedlings.
- The use of surfactant with VELPAR L CU is not advised for applications made over the tops of seedlings. Careful consideration must be given by an experienced and knowledgeable forester to ensure the specific growth requirements of yellow poplar will be provided by the selected planting site. Treatment of yellow poplar planted on a site inadequate to meet its requirements may injure or kill the seedlings.

USE RESTRICTIONS - YELLOW POPLAR PLANTINGS

- Applications of VELPAR L CU and tank mixes of VELPAR L CU and metsulfuron must only be made after adequate rainfall has closed the planting slit and settled the soil around the roots following transplanting.
- **DO NOT** apply more than 8 pints (2 lbs ai hexazinone) per acre per year.
- **DO NOT** apply more than 8 pints (2 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

PASTURE/RANGELAND

VELPAR L CU is labeled for control of brush and weeds in pasture.

BERMUDAGRASS/ BAHIAGRASS

VELPAR L CU is labeled for control of smutgrass and other weeds in established stands of bermudagrass and bahiagrass.

APPLICATION INFORMATION

Make a single application of VELPAR L CU per year when weeds are actively growing.

WEEDS CONTROLLED - USE RATES

VELPAR L CU effectively controls the following weeds at the rates shown. Use a lower rate on coarse-textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

2 3/4 – 4 1/2 Pints/Acre (0.69 – 1.125 lbs ai hexazinone/acre)	
Barley, little	<i>Hordeum pusillum</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Fescue	<i>Festuca</i> spp
Lespedeza	<i>Lespedeza cuneata</i>
Oxalis	<i>Oxalis</i> spp
Passionflower, maypop	<i>Passiflora incarnate</i>
Pepperweed, Virginia	<i>Lepidium virginicum</i>
Pigweed	<i>Amaranthus</i> spp
Smutgrass*	<i>Sporobolus indicus</i>

*Suppression may result with some of the giant (larger) smutgrass species.

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

SPRAY EQUIPMENT

Apply VELPAR L CU uniformly over the desired area using ground equipment only.

For ground application, use enough water for thorough coverage usually a minimum of 25 gallons per acre. The use of a surfactant may increase the potential for bermudagrass or bahiagrass injury.

USE PRECAUTIONS - BERMUDAGRASS/BAHIAGRASS

- For bermudagrass that may be grown in the states of ID, OR, UT, or WA, determine the suitability of using VELPAR L CU by treating a small area at a labeled application rate prior to treating larger areas. The smaller treated area must be observed for any signs of herbicidal injury during 60 days of normal growing conditions to determine if the treatment is safe to bermudagrass. If this evaluation is not completed prior to use, the user assumes the responsibility to the extent consistent with applicable law for any plant damage or other liability resulting from the use of VELPAR L CU on bermudagrass.
- Some temporary discoloration of the bermudagrass or bahiagrass may occur after application.
- Treatment of mixed pastures containing forage species other than bermudagrass or bahiagrass may result in injury or mortality to the other forage species.
- Injury may result when desirable grasses are under stress from drought, insects, disease, cold temperature, or poor fertility.
- Injury to or loss of desirable trees or other plants may result if VELPAR L CU is applied or if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Severe crop injury may occur if applications are made on gravelly or rocky soils, thinly covered subsoils, or soils with less than 1% organic matter.

USE RESTRICTIONS - BERMUDAGRASS/BAHIAGRASS

- Use VELPAR L CU only in stands of bermudagrass and bahiagrass established for at least one year. **DO NOT** treat newly sprigged or sodded areas.
- **DO NOT** apply VELPAR L CU broadcast at rates greater than 4.5 pints (1.125 lb ai hexazinone) per acre per year.
- **DO NOT** apply VELPAR L CU broadcast at rates greater than 4.5 pints (1.125 lb ai hexazinone) per acre per application.
- Livestock may be grazed immediately following a broadcast application of VELPAR L CU at rates of 4.5 pints (1.125 lbs ai hexazinone) per acre or less, and treated vegetation may be cut, dried and fed after 38 days.
- **DO NOT** make more than 1 application of VELPAR L CU per year when used as a broadcast application.

PASTURE/RANGELAND - BRUSH CONTROL

VELPAR L CU may be used either broadcast or as a basal-soil treatment for the control of undesirable brush in pasture or rangeland.

APPLICATION INFORMATION

Apply VELPAR L CU from late winter through summer, pre-budbreak until new growth hardens off.

In areas where the soil remains frozen during the winter and spring rains are usually inadequate for soil activation, a fall or winter treatment may be applied before the soil freezes.

For broadcast rates needed to control the species below, see the **RELEASE – WOODY BRUSH CONTROL** section.

BRUSH SPECIES CONTROLLED

VELPAR L CU is labeled for the control or suppression of the following brush species in pasture and rangeland:

Alder	<i>Alnus spp</i>
Ash	<i>Fraxinus spp</i>
Aspen	<i>Populus spp</i>
Birch	<i>Betula spp</i>
Blackgum	<i>Nyssa sylvatica</i>
Bay, sweet	<i>Magnolia virginiana</i>
Cactus, cholla [†]	<i>Optunia imbricata</i>
Catclaw acacia	<i>Acacia greggii</i>
Cedar, Eastern red	<i>Juniperus virginiana</i>
Cherry, black	<i>Prunus serotina</i>
Chinaberry*	<i>Melia azedarach</i>
Deerbrush	<i>Ceanothus integerrimus</i>
Dogwood, flowering*	<i>Cornus florida</i>
Elm, American	<i>Ulmus Americana</i>
Elm, Chinese	<i>Ulmus parvifolia</i>
Hackberry, common	<i>Celtis occidentalis</i>
Hawthorn	<i>Crataegus spp</i>
Hazel	<i>Corylus spp</i>
Hickory	<i>Carya spp</i>
Huisache	<i>Acacia farnesiana</i>
Juniper	<i>Juniperus spp</i>
Locust	<i>Robinia spp</i>
Lotebush	<i>Ziziphus obtusifolia</i>
Manzanita, Greenleaf	<i>Arctostaphylos patula</i>
Maple, red	<i>Acer rubrum</i>
Mesquite	<i>Prosopis glandulosa</i>
Mulberry	<i>Morus spp</i>
Oaks	<i>Quercus spp</i>
Osage-orange	<i>Maclura pomifera</i>
Persimmon	<i>Diospyros spp</i>
Plum, wild	<i>Prunus munsoniana</i>
Poplar, balsam	<i>Populus balsamifera</i>
Poplar, yellow	<i>Liriodendron tulipifera</i>
Privet	<i>Ligustrum spp</i>
Rose, multiflora	<i>Rosa multiflora</i>
Sassafras*	<i>Sassafras albidum</i>
Soapweed, small (yucca)	<i>Yucca glauca</i>

Snowbrush (varnishleaf)	<i>Ceanothus velutinus</i>
Sourwood	<i>Oxydendrum arboretum</i>
Sumac	<i>Rhus</i> spp
Sweetgum	<i>Liquidambar</i> spp
Tallow, Chinese	<i>Sapium sebiferum</i>
Waxmyrtle	<i>Myrica cerifera</i>
Whitebrush	<i>Aloysia gratissima</i>
Willow	<i>Salix</i> spp

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

†For Cholla cactus (tree-type cactus) apply VELPAR L CU at the rate of 4 milliliters (mls) of product for plants up to 2 feet tall. Apply 8 mls of product for Cholla cactus plants between 2 and 6 feet tall. For plants taller than 6 feet, apply 4 mls for each additional 2 feet of height. When treating plants it is desirable to make applications equally spaced around the plant.

SOIL APPLIED BASAL TREATMENT

Apply VELPAR L CU undiluted with an exact-delivery handgun applicator. This equipment delivers a thin stream of a predetermined volume when triggered. Apply VELPAR L CU at the rate of 2–4 ml for each inch of stem diameter at breast height. **DO NOT** exceed 2.67 pints of VELPAR L CU (0.66 lb ai hexazinone) per acre per year. Direct the treatment to the soil within 3 inches of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of VELPAR L CU is needed per stem, make applications on opposite sides of the stem.

USE PRECAUTIONS FOR PASTURE/RANGELAND

- Injury to or loss of desirable trees or other plants may result if VELPAR L CU is applied or if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Poor weed and brush control may result from the following:
 - Use on poorly drained sites
 - Applications made when the soil is saturated with water and rain is imminent within 24 hours
 - Applications to soils high in organic matter (greater than 5%)
- Following mechanical cutting or clearing, allow stumps and injured trees sufficient time to adequately resprout before applying VELPAR L CU.
- Weed and brush control results depend on sufficient moisture to activate VELPAR L CU.

USE RESTRICTIONS FOR PASTURE/RANGELAND

- **DO NOT** use VELPAR L CU on frozen soils.
- When VELPAR L CU is applied as a basal soil treatment, there is no restriction on grazing by domestic animals nor on cutting surrounding vegetation for forage or hay.
- When used as a basal (soil) application, do not apply VELPAR L CU at rates greater than 2.67 pints (0.66 lb ai hexazinone) per acre per year or in a single application. When VELPAR L CU is applied as a basal (soil) treatment, there is no restriction on grazing by domestic animals nor on cutting surrounding vegetation for forage or hay.
- When VELPAR L CU is broadcast-applied at rates up to 4.5 pints (1.125 lbs ai hexazinone) per acre, livestock may be grazed immediately following treatment and treated vegetation may be cut, dried, and fed after 38 days. For applications from 4.5 to 16 pints of VELPAR L CU (1.125 to 4 lbs ai hexazinone) per acre, **DO NOT** cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application.
- **DO NOT** make more than 1 application of VELPAR L CU per year when used as a basal (soil) or broadcast applications.

PINEAPPLE

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

APPLICATION INFORMATION

Mix the proper amount of VELPAR L CU in water. Add a surfactant at 0.25% by volume of water.

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 L CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 0.9–7 pints (0.23 lb – 1.75 lb ai hexazinone) per acre. For aerial application, use at least 10 gallons water per acre.

Post mulch, preplant - Apply VELPAR L CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 0.9–7

pints (0.23 lb – 1.75 lb ai hexazinone) per acre.

Post plant, before planting material starts active growth

- Apply VELPAR L CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 0.9–7 pints (0.23 lb – 1.75 lb 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.

Post-plant crop harvest, prior to forcing first ratoon - Apply VELPAR L CU as a broadcast spray in 100–400 gallons of water per acre at the rate of 0.9–7 pints (0.23 lb – 1.75 lb ai hexazinone) per acre.

Directed postemergence (pineapple and weeds) inter- space application - Apply VELPAR L CU as a directed spray 3–10 months after planting in 50–200 gallons of water per acre (broadcast basis) at the rate of 0.9–7 pints (0.23 lb – 1.75 lb 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 3.5–7 pints (0.88 lb – 1.75 lb ai hexazinone) per 100 gallons of water as a spot treatment.

Treatments to field edges and roadsides - Apply VELPAR L CU at 7–14.5 pints (1.75 – 3.63 lb ai hexazinone) per acre in 100–400 gallons of water.

WEEDS CONTROLLED

VELPAR L CU is labeled for the control or suppression of the following weeds in pineapple crops:

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

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

Restrictions (Pineapple):

- **DO NOT** exceed 1.81 gallons VELPAR L CU (3.63 lbs ai hexazinone) per acre per year.
- **DO NOT** apply VELPAR L CU within 181 days of harvest.
- **DO NOT** exceed 1.81 gallons VELPAR L CU (3.63 lbs ai hexazinone) per acre per application.
- **DO NOT** exceed 1 application per year.

SUGARCANE

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

APPLICATION INFORMATION

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

HAWAII

Apply VELPAR L CU pre- or postemergence at 1.8 to 3.4 pints VELPAR L CU (0.45 lb – 0.85 lb ai hexazinone) plus surfactant 0.25% by volume per acre per application.

Use the higher levels of the labeled rate ranges on soils higher in organic matter and with fine texture (e.g., loam, silt loam, silty clay loam, clay, gray hydromorphic clay). 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 L CU may be applied with aerial equipment using at least 10 gallons of spray per acre.

Apply VELPAR L CU herbicide as a spot spray application for emerged weeds in sugarcane. Mix 3 to 12 pints of VELPAR L CU (0.75 lb ai – 3 lbs ai hexazinone) 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 3.4 pints (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.

Restriction (Sugarcane, HI):

- **DO NOT** apply more than 6.8 pints VELPAR L CU (1.7 lbs ai hexazinone) per acre per year.

LOUISIANA

Apply 1.8–3.4 pints of VELPAR L CU (0.45 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 1.8–3 pints (0.45 lb – 0.75 lb ai hexazinone) per acre may be followed by a spring treatment of 1.8–3 pints (0.45 lb – 0.75 lb ai hexazinone) per acre. Use the higher levels of the labeled rate range on fine-textured soils.

Restriction (Sugarcane, LA):

- **DO NOT** apply more than 6 pints VELPAR L CU (1.5 lbs ai hexazinone) per year.

PUERTO RICO

For preemergence treatments, apply 0.9–1.8 pints of VELPAR L CU (0.23 lb – 0.45 lb ai hexazinone) per acre.

For postemergence treatments, apply 0.9–1.8 pints of VELPAR L CU (0.23 lb – 0.45 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 1.8 pints of VELPAR L CU (0.45 lb ai hexazinone) per acre.

For spot treatment of emerged weeds, VELPAR L CU may be applied with a knapsack sprayer in concentrations of 0.9–1.8 pints (0.23 lb – 0.45 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 1.8 pints VELPAR L CU (0.45 lb ai hexazinone) per acre.

Restriction (Sugarcane, PR):

- **DO NOT** apply more than 3.6 pints of VELPAR L CU (0.9 lbs ai hexazinone) per acre per year.

TEXAS

Apply 1.8–3.4 pints of VELPAR L CU (0.45 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 L CU preemergence or 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.

Restriction (Sugarcane, TX):

- **DO NOT** apply more than 6.8 pints of VELPAR L CU (1.7 lbs ai hexazinone) per acre per year.

Use the following rates for the soil texture:

Soil Texture Description	VELPAR L CU (Pints/Acre)**	
	Preemergence +	Layby
Coarse*		
Sandy loam	1.8	1.8
Medium		
Loam, silt loam	2.7	2.7
Fine		
Clay loam	3.4	3.4

* With at least 2% organic matter

** 1.8 pints VELPAR L CU has 0.45 lb ai hexazinone. 2.7 pints VELPAR L CU 0.68 lb ai hexazinone. 3.4 pints VELPAR L CU has 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 L CU will control or suppress 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	<i>Lamium amplexicaule</i>
Itchgrass*	<i>Rottboellia cochinchinensis</i>
Job's-tears	<i>Coix lacryma</i>
Johnsongrass (seedling)	<i>Sorghum halepense</i>
Junglerice	<i>Echinochloa colonum</i>
Lambsquarters, common	<i>Chenopodium album</i>
Millet, Texas	<i>Panicum texanum</i>
Morningglory, hairy	<i>Ipomoea pentaphylla</i>
Morningglory, threelobe	<i>Ipomoea triloba</i>
Mustard, wild	<i>Sinapis arvensis</i>
Oxalis	<i>Oxalis spp</i>
Paintbrush, Flora's	<i>Emilia sonchifolia</i>
Panicum, browntop	<i>Panicum fasciculatum</i>
Paspalum, ricegrass	<i>Paspalum orbiculare</i>
Paspalum, sour	<i>Paspalum conjugatum</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>
Pigweed, slender (green)	<i>Amaranthus viridis</i>
Pigweed, smooth	<i>Amaranthus chlorostachys</i>
Popolo	<i>Solanum sandwicense</i>
Purslane, common	<i>Portulaca oleracea</i>
Sandbur	<i>Cenchrus spp</i>
Sensitive plant (hila hila)	<i>Mimosa spp</i>
Signalgrass, broadleaf	<i>Brachiaria platyphylla</i>
Sowthistle, common	<i>Sonchus oleraceus</i>
Spanishneedles	<i>Bidens bipinnata</i>
Sprangletop	<i>Leptochloa spp</i>
Spurge, prostrate	<i>Euphorbia humistrata</i>
Spurge, graceful	<i>Chamaesyce hypericifolia</i>
Sunflower	<i>Helianthus spp</i>
Vaseygrass	<i>Paspalum urvillei</i>
Waltheria (hia loa)	<i>Waltheria spp</i>

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

USE PRECAUTIONS - SUGARCANE

- 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.
- 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** add a surfactant in applications unless otherwise specified or allowed

Restrictions (Sugarcane):

- **DO NOT** plant any crop other than sugarcane following an application of VELPAR L CU.
- **DO NOT** feed sugarcane forage to livestock.
- **DO NOT** apply VELPAR L 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.
- **DO NOT** use VELPAR L CU on cane that shows poor vigor because of insect damage, disease, or winter injury, or shows symptoms of other stress conditions like drought stress.
- **DO NOT** use VELPAR L CU on gravelly or rocky soils, thinly covered subsoils, or coarse-textured soils (sands to sandy loams) with less than 1% organic matter.

- **DO NOT** use VELPAR L CU on varieties known to be susceptible to herbicides.
- **DO NOT** exceed 3.4 pints (0.85 lb ai hexazinone) per acre per application.
- **DO NOT** exceed the following per acre per year limits:
 - 6.8 pints VELPAR L CU (1.7 lbs ai hexazinone) in Hawaii
 - 6 pints VELPAR L CU (1.5 lbs ai hexazinone) in Louisiana
 - 3.6 pints VELPAR L CU (0.9 lb ai hexazinone) in Puerto Rico
 - 6.8 pints VELPAR L CU (1.7 lbs ai hexazinone) in Texas.
- In Texas, **DO NOT** exceed 2 applications per year.
- In Texas, the minimum number of days between applications is 60.
- For all other states, **DO NOT** exceed 1 application per year.

NON-CROP USES

Respirator fit testing, medical qualification, and training

Using a program that conforms to OSHA’s requirements (see 29 CFR Part 1910.134), employers must verify that any handler who uses a respirator is:

- Fit-tested and fit-checked,
- Trained, and
- Examined by a qualified medical practitioner to ensure physical ability to safely wear the style of respirator to be worn. A qualified medical practitioner is a physician or other licensed health care professional who will evaluate the ability of a worker to wear a respirator. The initial evaluation consists of a questionnaire that asks about medical conditions (like heart condition) that would be problematic for respirator use. If concerns are identified, then additional evaluations, like a physical exam, might be necessary. The initial evaluation must be done before respirator use begins. Handlers must be reexamined by a qualified medical practitioner if their health status or respirator style or use-conditions change.
- Upon request by local/state/federal/tribal enforcement personnel, employers must provide documentation demonstrating how they have complied with these requirements

APPLICATION INFORMATION

VELPAR L CU is labeled for general weed and brush control as follows: uncultivated nonagricultural areas (including, airports, highway, railroad and utility right-of ways, sewage disposal areas); uncultivated agricultural areas (non-crop producing, which includes: farmyards, fuel storage areas, fence rows, barrier strips); industrial sites (outdoor, including, lumberyards, pipeline and tank farms).

VELPAR L CU is labeled as a preemergence or postemergence spray for control of germinating or growing annual, biennial, and perennial weeds in non-crop sites.

NON-CROP HERBACEOUS WEED CONTROL

WEEDS CONTROLLED AND USE RATES

VELPAR L CU effectively controls the following weeds when applied at the use rates shown in industrial sites. When applied at lower rates, VELPAR L CU provides short-term control of the weeds listed; when applied at higher rates, weed control is increased and extended. Use lower rate on coarse-textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

1 – 2 ½ Gallons/Acre (2-5 lbs ai hexazinone/Acre)	
Barnyardgrass	<i>Echinochloa crus-galli</i>
Bindweed, field*	<i>Convolvulus arvensis</i>
Bouncingbet*	<i>Saponaria officinalis</i>
Bromegrass	<i>Bromus</i> spp.
Buffalograss*	<i>Buchloe dactyloides</i>
Burdock	<i>Arctium</i> spp.
Cocklebur	<i>Xanthium</i> spp.
Crabgrass	<i>Digitaria</i> spp.
Crown vetch	<i>Coronilla varia</i>
Curly dock*	<i>Rumex crispus</i>
Dandelion, common*	<i>Taraxacum officinale</i>
Dandelion, false* (spotted catsear)	<i>Hypochaeris radicata</i>

Dogbane*	<i>Apocynum cannabinum</i>
Fiddleneck, tarweed	<i>Amsinckia lycopoides</i>
Filaree	<i>Erodium</i> spp.
Fleabane, flax-leaved	<i>Conyza bonariensis</i>
Goatsbeard vine (sweet briar)	<i>Aruncus sylvester</i>
Goldenrod	<i>Solidago</i> spp.
Horseweed/marestail	<i>Conyza canadensis</i>
Lespedeza	<i>Lespedeza cuneata</i>
Milkweed, common*	<i>Asclepias syriacea</i>
Mustard, wild	<i>Sinapis arvensis</i>
Nutsedge*	<i>Cyperus</i> spp.
Oats, wild*	<i>Avena fatua</i>
Orchardgrass*	<i>Dactylis glomerata</i>
Orchardgrass (seedling)	<i>Dactylis glomerata</i>
Oxalis	<i>Oxalis</i> spp.
Paragrass	<i>Panicum purpurascens</i>
Parsnip, wild	<i>Pastinaca sativa</i>
Pigweed	<i>Amaranthus</i> spp.
Purslane, common	<i>Portulaca oleracea</i>
Quackgrass	<i>Agropyron repens</i>
Ryegrass, Italian (annual)	<i>Lolium multiflorum</i>
Smartweed	<i>Polygonum</i> spp.
Spurge	<i>Euphorbia</i> spp.
Star thistle	<i>Centaurea</i> spp.
Trumpetcreeper*	<i>Campsis radicans</i>
3-4 Gallons/Acre (6-8 lbs ai hexazinone/Acre)	
Aster, heath	<i>Aster ericoides</i>
Bahiagrass*	<i>Paspalum notatum</i>
Bermudagrass*	<i>Cynodon dactylon</i>
Blackberry	<i>Rubus</i> spp.
Bluegrass	<i>Poa</i> spp.
Broomsedge	<i>Andropogon virginicus</i>
Camphorweed	<i>Heterotheca subaxillaris</i>
Canada thistle*	<i>Cirsium arvense</i>
Carrot, wild	<i>Daucus carota</i>
Chickweed	<i>Stellaria media</i>
Clovers	<i>Trifolium</i> spp.
Dewberry	<i>Rubus trivialis</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Fescue*	<i>Festuca</i> spp.
Fingergrass	<i>Digitaria ciliaris</i>
Foxtail	<i>Setaria</i> spp.
Guineagrass	<i>Panicum maximum</i>
Honeysuckle	<i>Lonicera</i> spp.
Horseweed/marestail	<i>Conyza canadensis</i>
Lantana	<i>Lantana camara</i>
Lettuce, prickly	<i>Lactuca serriola</i>
Natalgrass (red top)	<i>Rhynchelytrum repens</i>
Plantain	<i>Plantago</i> spp.
Ragweed, common	<i>Ambrosia elatior</i>
Smutgrass**	<i>Sporobolus indicus</i>
Spanishneedles	<i>Bidens bipinnata</i>
Vaseygrass	<i>Paspalum urvillei</i>

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

** Suppression may result with some of the giant (larger) smutgrass species.

SPECIFIC WEED PROBLEMS

Control of Canada Thistle in Crown Vetch – VELPAR L CU is labeled for control of Canada thistle in established stands of crown vetch on noncrop sites. Make a single application of 3-5 pints of VELPAR L CU (0.75-1.25 lbs ai hexazinone) from late spring through mid-summer, when thistle is actively growing prior to flowering. **DO NOT** use a surfactant. Some discoloration of the crown vetch foliage may occur after application.

SPRAY EQUIPMENT

Apply VELPAR L CU uniformly over the desired area using ground equipment or helicopter. **DO NOT** apply more than 3 gallons (6 lbs ai hexazinone) per acre of VELPAR L CU.

Use enough water for thorough coverage (for ground application, a minimum of 25 gallons per acre). Higher application volumes may be needed to obtain uniform application with handgun equipment. For aerial applications (helicopter only) this is usually a minimum of 5 gallons per acre. Higher volumes of water may be needed when water temperatures are cold or the higher rates of VELPAR L CU are used.

NON-CROP

BRUSH CONTROL

VELPAR L CU is labeled for the control of undesirable brush in non-crop sites.

APPLICATION INFORMATION

Apply VELPAR L CU from late winter through summer, pre- bud break until new growth hardens off.

In areas where soils remains frozen during the winter and spring rains are usually inadequate for soil activation, a fall or winter treatment may be applied before the soil freezes.

BROADCAST APPLICATION

Apply 2-4 gallons (4-8 lbs ai hexazinone) of VELPAR L CU per acre as a coarse spray by ground equipment or 2-3 gallons (4-6 lbs ai hexazinone) per acre by air (helicopter only). Use enough water for thorough coverage. For ground, equipment usually a minimum of 25 gallons per acre. For aerial equipment, usually a minimum of 10 gallons per acre. Higher volumes of water may be needed when water temperatures are cold or the higher rates of VELPAR L CU are used.

SOIL APPLIED BASAL TREATMENT

Undiluted – Apply VELPAR L CU undiluted with an exact-delivery handgun applicator. This equipment delivers a thin stream of predetermined volume when triggered. Apply VELPAR L CU at the rate of 2 to 4 ml for each inch of stem diameter at breast height. Do not exceed 4 gallons (8 lbs ai hexazinone) of VELPAR L CU per acre per year. Direct the treatment to the soil within 3 feet of the root collar of woody plants to be controlled. When treating large stems and when more than one delivery of VELPAR L CU is needed per stem, make applications on opposite sides of the stem.

For multi-stemmed and low-growing brush that have stem diameters that are difficult to determine, apply VELPAR L CU at the rate of 2 to 4 ml per 3 feet of canopy width. For tall, slender (columnar) brush types, apply 4 to 8 ml per 3 feet of height. Base the rate on whichever canopy dimension is greater (width or height).

When treating brush that requires more than a single 4 ml application of VELPAR L CU, apply subsequent applications equally spaced around the plant. If treating brush on sloped sites, apply most of the VELPAR L CU on the uphill side of the stem. If treating resprouts from brush disturbed by cutting or shredding, the rate of application must be proportional to the original tree size, not just the small regrowth of sprouts.

Diluted – Mix one gallon (2 lbs ai hexazinone) of VELPAR L CU with 5 or more gallons of water. Apply 2 to 4 gallons (4-8 lbs ai hexazinone) of VELPAR L CU per acre. Direct the spray to the soil in a serpentine pattern so that the swath on the soil is 6 to 12 inches wide at the base of the brush. Swaths must be 2 to 4 feet apart.

WEEDS CONTROLLED AND USE RATES

VELPAR L CU is labeled for the control or suppression of the following species in non-crop sites. Use lower rate on coarse-textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

2-4 Gallons/Acre (4-8 lbs ai hexazinone/Acre)	
Alder	<i>Alnus</i> spp.
Ash	<i>Fraxinus</i> spp.
Aspen	<i>Populus</i> spp.
Birch	<i>Betula</i> spp.
Blackgum	<i>Nyssa sylvatica</i>

2-4 Gallons/Acre (4-8 lbs ai hexazinone/Acre)	
Bay, sweet	<i>Magnolia virginiana</i>
Cactus, cholla**	<i>Optunia imbricata</i>
Catclaw acacia	<i>Acacia greggii</i>
Cedar, Eastern red	<i>Juniperus virginiana</i>
Cherry, black	<i>Prunus serotina</i>
Chinaberry*	<i>Melia azedarach</i>
Deerbrush	<i>Ceanothus integerrimus</i>
Dogwood, flowering*	<i>Cornus florida</i>
Elm, American	<i>Ulmus Americana</i>
Elm, Chinese	<i>Ulmus parvifolia</i>
Hackberry, common	<i>Celtis occidentalis</i>
Hawthorn	<i>Crataegus spp.</i>
Hazel	<i>Corylus spp.</i>
Hickory	<i>Carya spp.</i>
Huisache	<i>Acacia farnesiana</i>
Juniper	<i>Juniperus spp.</i>
Locust	<i>Robinia spp.</i>
Lotebush	<i>Ziziphus obtusifolia</i>
Manzanita, Greenleaf	<i>Arctostaphylos patula</i>
Maple, red	<i>Acer rubrum</i>
Mesquite	<i>Prosopis glandulosa</i>
Mulberry	<i>Morus spp.</i>
Oaks	<i>Quercus spp.</i>
Osage-orange	<i>Maclura pomifera</i>
Persimmon	<i>Diospyros spp.</i>
Plum, wild	<i>Prunus munsoniana</i>
Poplar, balsam	<i>Populus balsamifera</i>
Poplar, yellow	<i>Liriodendron tulipifera</i>
Privet	<i>Ligustrum spp.</i>
Rose, multiflora	<i>Rosa multiflora</i>
Sassafras*	<i>Sassafras albidum</i>
Soapweed, small (yucca)	<i>Yucca glauca</i>
Snowbrush (varnishleaf)	<i>Ceanothus velutinus</i>
Sourwood	<i>Oxydendrum arboretum</i>
Sumac	<i>Rhus spp.</i>
Sweetgum	<i>Liquidambar spp.</i>
Tallow, Chinese	<i>Sapium sebiferum</i>
Waxmyrtle	<i>Myrica cerifera</i>
Whitebrush	<i>Aloysia gratissima</i>
Willow	<i>Salix spp.</i>

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

** For Cholla cactus (tree-type cactus) apply VELPAR L CU at the rate of 4 ml of product for plants up to 2 feet tall. Apply 8 ml of product for Cholla cactus plants between 2 and 6 feet tall. For plants taller than 6 feet, apply 4 ml for each additional 2 feet of height.

When treating plants it is desirable to make applications equally spaced around the plant.

INDUSTRIAL TURFGRASS

VELPAR L CU is labeled for selective weed control in established stands of bermudagrass and/or bahiagrass in noncrop areas.

APPLICATION TIMING

Make a single application of VELPAR L CU per year when weeds are actively growing.

WEEDS CONTROLLED AND USE RATES

VELPAR L CU effectively controls the following weeds at the rates shown in industrial turf (unimproved only). Use a lower rate on coarse textured soils (sand to sandy loam). Use the higher rate on fine-textured soils (clay loam to clay) and on soils high in organic matter.

2 ¾ - 4 ½ Pints/Acre (0.69-1.125 lbs ai hexazinone/Acre)	
Barley, little	<i>Hordeum pusillum</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Dogfennel	<i>Eupatorium capillifolium</i>
Fescue	<i>Festuca</i> spp.
Lespedeza	<i>Lespedeza cuneata</i>
Oxalis	<i>Oxalis</i> spp.
Passionflower, maypop	<i>Passiflora incarnate</i>
Pepperweed, Virginia	<i>Lepidium virginicum</i>
Pigweed	<i>Amaranthus</i> spp.
Smutgrass*	<i>Sporobolus indicus</i>

*Suppression may result with some of the giant (larger) smutgrass species.

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

SPRAY EQUIPMENT

Apply VELPAR L CU uniformly over the desired area using ground equipment only.

For ground application, use enough water for thorough coverage (a minimum of 25 gallons per acre). The use of a surfactant is not advised.

USE PRECAUTIONS FOR ALL NON-CROP SITES

- For bermudagrass that may be grown in the states of ID, OR, UT, or WA, determine the suitability of using VELPAR L CU by treating a small area at a labeled application rate prior to treating larger areas. The smaller treated area must be observed for any signs of herbicidal injury during 60 days of normal growing conditions to determine if the treatment is safe to bermudagrass. If this evaluation is not completed prior to use, the user assumes the responsibility to the extent consistent with applicable law for any plant damage or other liability resulting from the use of VELPAR L CU on bermudagrass.
- Injury to or loss of desirable trees or other plants may result if VELPAR L CU is applied or if equipment is drained or flushed on or near desirable trees or other plants, on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Application spray drift may injure desirable plants.
- Poor weed and brush control may result from the following:
 - Use on poorly drained sites
 - Applications made when the soil is saturated with water and rain is imminent within 24 hours.
 - Applications to soils high in organic matter (greater than 5%)
- Following mechanical cutting or clearing, allow stumps and injured trees sufficient time to adequately resprout before applying VELPAR L CU.
- Leave treated soil undisturbed to reduce the potential for VELPAR L CU movement by soil erosion due to wind or water.
- Some discoloration of the bermudagrass or bahiagrass may occur after application.
- Injury may result when desirable grasses are under stress from drought, insects, disease, cold temperature, or poor fertility.
- Severe turfgrass injury may occur if applications are made on gravelly or rocky soils, thinly covered subsoils, or soils with less than 1% organic matter.

USE RESTRICTIONS - ALL NON-CROP SITES

- **DO NOT** use VELPAR L CU on frozen soils.
- **DO NOT** use VELPAR L CU on lawns, driveways, tennis courts, or other residential or recreational areas.
- Weed and brush control results from spring applications depend on sufficient moisture to activate VELPAR L CU.
- There are no grazing or haying restrictions for the directed basal-soil applications of VELPAR L CU.
- Use VELPAR L CU only in stands of bermudagrass and bahiagrass turfgrasses established for at least one year. **DO NOT** treat newly sprigged or sodded areas.
- **DO NOT** apply more than 4 gallons (8 lbs ai hexazinone) of VELPAR L CU per acre per year.
- **DO NOT** apply more than 4 gallons (8 lbs ai hexazinone) of VELPAR L CU per acre per application.
- **DO NOT** make more than three applications per year of VELPAR L CU on non-crop sites when using reduced application rates. Allow at least 30 days between applications.
- The minimum number of days between applications is 30.
- When making more than one application per year the following grazing/haying restrictions apply:

- At rate totals of 4.5 pints (1.125 lbs ai hexazinone) per acre of VELPAR L CU or less, livestock may be grazed immediately following a broadcast application of VELPAR L CU and treated vegetation may be cut, dried, and fed after 38 days.
- At rate totals of 4.5 pints to 3 gallons (1.125 to 6 lbs ai hexazinone) per acre of VELPAR L CU **DO NOT** cut treated vegetation for feed, or graze livestock on treated areas for 60 days following application.
- At rate totals greater than 3 gallons (6 lbs ai hexazinone) per acre VELPAR L CU **DO NOT** cut treated vegetation for feed, or graze livestock on treated areas for 1 year following application.

ADDITIONAL INSTRUCTIONS FOR AGRICULTURAL AND NON-CROP USES

SPRAY TANK CLEAN OUT

Thoroughly clean all traces of VELPAR L 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).

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 or disposal.

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

PESTICIDE DISPOSAL: Wastes resulting from the use of this product must 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 5 Gallons): 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 and drain for 10 seconds after the flow begins to drip. 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 5 Gallons): 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 and continue to drain for 10 seconds after the flow begins to drip. 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.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with VELPAR L CU 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 including 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.

Do not transport if 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.

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