

acceptance stamp
on pg 8 of 8

432-1228

08/06/2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

AUG 6 2003

Mr. Richard M. Gorrell
Manager, Registrations
Bayer Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645

Dear Mr. Gorrell:

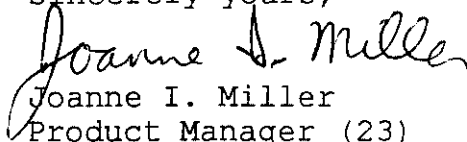
Subject: Derringer™ Herbicide
EPA Registration No. 432-1228 ✓
Application and Your Letter Dated June 11, 2003,
Request to Amend Registration To Add "and Woody
Plants" Top of Front Page; Changes Made Under
General Information, General Use Sites, Weeds
Controlled by Derringer Herbicide, Use Notes,
Woody Plant Use Recommendations and Woody Species
Controlled bySections (Text Changes, Deletions and
Additions); Your Letter Dated July 29, 2003, Submission
of Revised Labeling; FAX Revised Labeling Dated
August 4, 2003; and Faxed Revised Labeling Dated
August 5, 2003

The proposed amendments to the subject registration reflected on the submitted labeling received on August 5, 2003 have been reviewed and found acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended, provided that you:

1. Either delete the "Nonselective" claim in the front panel or describe in detail the meaning of the word "Nonselective" as it relates to this pesticide product. As used, it could be a false and misleading statement as described under section 40:CFR 156.10.
2. Revise the "Use Precaution" section statement: "DO NOT allow grazing of vegetation treated with this product." to read: "Do not cut treated vegetation for forage or hay, nor graze domestic animals on treated areas for one year following application."
3. Submit one copy of the final printed labeling prior to ship under the revised labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA, section 6(e). Your release for shipment of this product under the revised labeling constitutes acceptance of these conditions.

Sincerely yours,



Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

DERRINGER™ HERBICIDE

FOR NONSELECTIVE WEED CONTROL OF EMERGED WEEDS AND WOODY PLANTS IN NONCROP AREAS

ACTIVE INGREDIENT: Glufosinate Ammonium*.....11.33%**

OTHER INGREDIENTS:

.....88.67%

*CAS Number 77182-82-2 (Protected by U.S. Patent No 4,400,196)

TOTAL 100.00%

**Contains 1.0 pound of active ingredient per U.S. gallon.

EPA Reg. No. 432-122B

EPA Est. No. 407-1A-2

KEEP OUT OF REACH OF CHILDREN

WARNING – AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

IN CASE OF MEDICAL, ENVIRONMENTAL, OR TRANSPORTATION EMERGENCIES OR INQUIRIES, CALL 1-800-334-7577
For product inquiry information, call 1-800-331-2867

FIRST AID

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 t by a poison control center or doctor.
If in eyes:	Hold eyes 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. Call a poison control center or doctor for treatment advice.
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.
If inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible, followed by charcoal and sodium sulfate administration. Additionally, call 1-800-334-7577 immediately for further information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes substantial but temporary eye injury. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE)

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

Applicators and other handlers must wear:

Long-sleeved shirt and long pants; chemical-resistant gloves (such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton* ≥14 mils) shoes plus socks and protective eyewear.

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

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

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 clean equipment or dispose of equipment washwaters in a manner that will contaminate water resources or arable land. Glufosinate-ammonium and its degradates have those properties normally associated with pesticides that have been detected in groundwater. Use of this product in areas with coarse soils and high water tables may result in groundwater contamination.

STORAGE AND DISPOSAL

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

Do not use or store near heat or open flame.

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

CONTAINER DISPOSAL: Empty containers should be triple rinsed (or equivalent). Then offer for recycling or reconditioning, 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.

GENERAL INFORMATION

Derringer is a foliar active, water-soluble herbicide for application to foliage for control of a broad spectrum of existing vegetation. Derringer will also control certain woody species. Plants that have not yet emerged at the time of application will not be controlled. **THOROUGH SPRAY COVERAGE IS IMPORTANT.** Visual effects and control from application of Derringer occur within 2 to 4 days after application under good growing conditions. Cool temperatures may slow the activity of Derringer.

This product will injure or kill most green vegetation contacted. Avoid all contact with foliage or green tissue of desirable vegetation. Avoid direct spray contact with green, thin, or uncalloused bark of desirable vegetation or plant injury may result. If desirable vegetation is contacted, rinse the sprayed portion with water immediately.

Derringer works best when weeds are actively growing. Weed control may be reduced when applications are made to weeds under stress. Weeds under stress or in dense populations, or when daytime temperatures are below 50 degrees will require application at the highest rate recommended.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not use this product until you have read the entire label. 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.

In the State of New York only: Not for use in Nassau and Suffolk Counties.

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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry-interval (REI) of 12 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 such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton ≥ 14 mils; shoes plus socks; protective eyewear.

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. The application for trimming and edging, industrial, recreational and public areas, and farmsteads are not within the scope of the WPS. Keep unprotected persons out of the treated areas until sprays have dried.

GENERAL USE SITES

Industrial Areas

Derringer is labeled for use in areas such as: airports, commercial plants, storage and lumber yards, highways, educational facilities, fence lines, ditch banks, dry ditches, schools, parking lots, tank farms, pumping stations, parks, utility rights-of-way, roadsides, railroads, and similar industrial and other non-crop areas. Refer to the *How to Apply* section of this labeling for appropriate application rates to control specific weeds.

Applications may be made on a broadcast, spot, or directed treatment basis depending on the situation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat treatments may be necessary to control plants generating from regrowth of plant parts or seed.

HOW TO MIX

Derringer must be mixed with water to make a finished spray solution as follows:

1. Fill the spray tank with the required amount of water.
2. Add the proper amount of this product, then mix thoroughly.

HOW TO APPLY

Spot or Directed Applications

This product may be used as a spot- or directed-spray application. Prepare the desired volume of spray solution by mixing Derringer in water with the amounts indicated in the following table:

Table 1. Amount of Derringer added to water to make 1, 25, or 100 gallons of spray solution at dosages of 1-6%

% Dosages	Volume of Spray Solution		
	1 Gallon	25 Gallons	100 Gallons
	Derringer		
1 %	1½ fl oz	2 pints	1 gallon
1½%	2 fl oz	3 pints	1½ gallons
2½%	3 fl oz	5 pints	2½ gallons
3 %	4 fl oz	6 pints	3 gallons
6 %	8 fl oz	12 pints	6 gallons

Select appropriate dosage and spray undesirable vegetation foliage on a spray-to-wet basis. Do not apply beyond runoff. Ensure uniform and complete coverage. Use a coarse spray. To minimize drift, avoid spraying during windy conditions. Backpack, pump-up, and hydraulic sprayers may be used. Thoroughly clean the sprayer following use.

Broadcast or Boom Applications

Use a minimum of 20 gallons of water per acre with a minimum of 30 psi spray pressure.

Aerial Applications (Helicopter Application only)

Use a drift control device such as a Microfoil or Thru Value Boom when applying as a foliar treatment to utility rights-of-way, forestry plantings, ditch banks or other approved sites that may be near susceptible crops. Use a minimum of 5 gallons of water per acre to ensure thorough coverage. Spray pressure should be no greater than 30 psi. Do not apply when winds are gusty or under any condition which favor drift on to desirable vegetation. Applications under conditions, which cause drift of this product, will result in damage to vegetation contacted. Drift control additives may be used. If a drift control additive is used, observe and follow all directions and precautions as specified on the additive label.

Tank Mix Recommendations for Noncrop Uses

Tank mixes of Derringer plus one or more appropriate residual herbicide(s) listed on this label may be needed to control vegetation emerging from underground parts or seeds, as well as vegetative growth from previously treated plants. Derringer is compatible in tank mixes with many other herbicides; however, test for compatibility prior to tank mixing with tank mix partners other than those listed on this label. Use as directed on the labeling of the tank mix partner.

Tank mix application of Derringer plus one or more of the following herbicides is recommended for broad-spectrum postemergence and preemergence vegetation control.

Arsenal® Herbicide	Pendulum® WDG Herbicide
Barricade® 65WG Herbicide	Surflan® AS Specialty Herbicide

COMPATIBILITY TESTING WITH TANK MIX PARTNERS

A compatibility test must be conducted with any potential tank mix partner with Derringer, except with any one of those listed above. Using a clear glass quart jar, conduct the test as described below:

1. Fill the jar three-quarters full with water
2. Add the appropriate amount of herbicide in the following order: (a) dry flowable, (b) wettable powder, (c) aqueous suspensions, (d) flowables, (e) liquids and (f) solutions and emulsifiable or liquid concentrates. Shake or gently stir jar after each addition to thoroughly mix.
3. After adding all ingredients, let the mixture stand for 15 minutes and then look for separation, large flakes, precipitates, gels, and heavy oily film on the jar or other signs of incompatibility.
4. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with Derringer.

Weeds Controlled by Derringer (More Sensitive Plants)

(Lower Rate Use)

For spot application:

Apply 1% spray solution of Derringer when the weed height or diameter is less than 6 inches.

Apply 2½% spray solution of Derringer when the weed height or diameter is 6 inches or greater.

For broadcast application:

Apply 3 quarts Derringer per acre when the weed height or diameter is less than 6 inches.

Apply 4 quarts Derringer per acre when the weed height or diameter is 6 inches or greater.

Broadleaf Weeds	Grasses and Sedges
chickweed	barnyardgrass
clover	cupgrass
common cocklebur	fall panicum
filaree	giant foxtail
jimsonweed	goosegrass
kochia	green foxtail
London rocket	johnsongrass (rhizome)
malva (little mallow)	lovegrass
marehail	shattercane
purslane	stinkgrass
shepherdspurse	windgrass
smartweed	yellow foxtail

Weeds Controlled by Derringer (Less Sensitive Plants)

Higher Rate Use

For spot application:

Apply 3% spray solution solution of Derringer when the weed height or diameter is less than 6 inches.

Apply 4% spray solution of Derringer when the weed height or diameter is 6 inches or greater.

For broadcast application:

Apply 4 quarts Derringer per acre when the weed height or diameter is less than 8 inches tall.

Apply 6 quarts Derringer per acre when the weed height or diameter is 8 inches or greater.

Broadleaf Weeds	Grasses and Sedges
annual sowthistle	annual bluegrass
bindweed	bahiagrass
buffalobur	barley
burdock	Bermudagrass
Canada thistle	carpetgrass
curly dock	crabgrass
dandelion	dallisgrass
dogbane (hemp)	downy bromegrass
field gromwell	fescue
fleabane	guineagrass
goldenrod	Kentucky bluegrass
Henbit	nutsedge
horsetail	paragrass
lambquarters	quackgrass
leafy spurge	ryegrass
mugwort	sandbur
musk thistle	smooth bromegrass
nettle	torpedograss
nighthshade	vaseygrass
pennycress	wheat

pigweed, red root	wild oat
plantain	
pokeweed	
prickly lettuce	
ragweed	
Russian thistle	
tansy mustard	
velvetleaf	
vervain	
Virginia cooperleaf	
white heath aster	
wild buckwheat	
wild mustard	
wild onion	
wild rose	
wild turnip	
woodsorrel	
Virginia buttonweed	
yellow rocket	

Use Notes

The addition of 8.5 to 17 pounds of ammonium sulfate (spray grade) per 100 gallons of water (1 to 2% by weight) or 2 to 4 pounds of ammonium sulfate per acre may result in better weed control.

Woody Plant Use Recommendations

General

Use Derringer at rates from $\frac{1}{4}$ to $1\frac{1}{2}$ gallons per acre to control woody plants and not to exceed $1\frac{1}{2}$ gallons per acre per year. Non-ionic surfactants may be used when making foliar applications. Follow any special instructions on the surfactant manufacturer's label.

For hard-to-control woody plants such as elm, certain oaks or when plant leaf surfaces have hardened off, use the higher rate of Derringer or tank mix Derringer with other herbicides registered for control of these woody plants (Follow the label directions for the tank mix partner). Use the highest rate of Derringer when the brush height is greater than 12 ft. and the brush density exceeds 60% of the area to be treated.

Foliage Treatments With Ground Equipment

High Volume Applications

Mix $1\frac{1}{2}$ gallons of Derringer with water to make 50-100 gallons of spray solution. For best results, make sure that the targeted plant foliage is thoroughly covered.

Low Volume Applications

Mix $\frac{1}{4}$ to $1\frac{1}{2}$ gallons of Derringer in sufficient water to make 10-50 gallons of finished spray. The concentration of Derringer in the spray solution and the volume applied (10-50 gallons) should be adjusted according to the size and density of the vegetation (brush height less than 6 ft. and brush density less than 60% of area).

Backpack Sprayer: For best results, apply Derringer when brush height does not exceed 6 ft and the brush density is less than 60% of the area to be treated.

Vehicle-Mounted Sprayer: For best results, adjust the sprayer to deliver the spray solution at 1-2 gpm with a spray pressure of 50-75 psi.

Broadcast Applications With Ground Equipment

Mix $1\frac{1}{2}$ gallons of Derringer with water to make 25-100 gallons of spray solution. The amount of spray solution to use will depend on the height and density of the brush. Use spray nozzles and equipment that will provide thorough coverage of the targeted brush species. A non-ionic surfactant may be added to the spray mixture. Follow directions on the label of the surfactant.

Woody Species Controlled by Derringer

blackberry	<i>Rubus</i> spp.
deer brush	<i>Ceanothus integerrimus</i>
Douglas fir	<i>Pseudotsuga menziesii</i>
gallberry	<i>Ilex</i> spp.
hazel	<i>Corylus</i> spp.
honeysuckle	<i>Lonicera</i> spp.
huckleberry	<i>Gaylussacia</i> spp.
maple	<i>Acer</i> spp.

multiflora rose	<i>Rosa multiflora</i>
oak	<i>Quercus</i> spp.
pine	<i>Pinus</i> spp.
poison ivy	<i>Toxicodendron radicans</i>
poison oak	<i>Toxicodendron toxicarium</i>
roundleaf greenbriar	<i>Smilax rotundifolia</i>
salmonberry	<i>Rubus spectabilis</i>
sweet gum	<i>Liquidambar styraciflua</i>
sumac	<i>Rhus</i> spp.
thimbleberry	<i>Rubus parviflorus</i>
trumpet creeper	<i>Campsis radicans</i>
vine maple	<i>Acer circinatum</i>
Western red cedar	<i>Thuja plicata</i>

USE PRECAUTIONS

DO NOT apply more than 1½ gallons of Derringer per acre per year.

DO NOT apply this product through any type of irrigation system.

DO NOT apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation.

Derringer is rainfast in a minimum of one-half hour and an average of 4 hours after application depending upon weed species, environmental conditions, and herbicide application rate.

DO NOT allow grazing of vegetation treated with this product.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer Environmental Science. All such risks shall be assumed by the user or buyer.

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Bayer AG 2002

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Barricade is a registered trademark of Syngenta Crop Protection Inc.
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Viton is a registered trademark of DuPont Company.
Derringer is a trademark of Bayer AG

Bayer Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645

Derringer Amendment 8/5/03

ACCEPTED
with COMMENTS
In EPA Letter Dated

AUG 6 2003

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

432-1228