

432-960

10/6/2003

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

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Richard M Gorrell
Bayer Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645

OCT 6 2003

Dear Mr. Gorrell:

Subject: Revised Labeling
Derringer F Herbicide
EPA Registration No. 432-960 ✓
Your Submission Dated September 15, 2003

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

- Add a box around the Agricultural Use Requirements section or otherwise highlight the text in this section from the rest of the labeling.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

A handwritten signature in cursive script that reads "Joanne I. Miller".

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

Enclosure

DERRINGER™ F HERBICIDE

For Postemergence Weed Control in Conifer and
Hardwood Tree Plantings

ACTIVE INGREDIENT:

Glufosinate-ammonium†
(CAS Number 77182-82-2)11.33% *

OTHER INGREDIENTS:88.67%

TOTAL100.00%

Equivalent to 1.00 pound of active ingredient per U.S. gallon

†Protected by U.S. Patent No. 4,400,196

**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.)

EPA Registration Number 432-960

EPA EST. NO.

IN CASE OF MEDICAL, ENVIRONMENTAL, OR TRANSPORTATION EMERGENCIES OR INJURIES,
CALL 1-800-471-0660 (24 hours/day).

FOR PRODUCT INFORMATION,
Call toll-free: 1-800-331-2867

ACCEPTED
with COMMENTS
in EPA Letter Dated
OCT - 6 2003

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

432-960

NET CONTENTS:

CHIPCO®
Professional Products

BAYER ENVIRONMENTAL SCIENCE USA LP

95 Chestnut Ridge Road * Montvale, NJ 07645
Derringer is a trademark of the Aventis Group

IN CASE OF MEDICAL, ENVIRONMENTAL, OR TRANSPORTATION EMERGENCIES OR INQUIRIES, CALL 1-800-334-7577 (24 hours/day)
For product inquiry information, call toll free: 1-800-331-2867

FIRST AID

If swallowed:	<ul style="list-style-type: none"> • 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 by a poison control center or doctor.
If in eyes:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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 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 HUMAN 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; 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™ F Herbicide is a non-selective water-soluble herbicide for application as a foliar spray. When applied as recommended in this label, Derringer F Herbicide controls a broad spectrum of emerged annual and perennial grass and broadleaf weeds. Derringer F Herbicide will also control certain woody species including conifers. 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 Finale VM Herbicide occur within 2 to 4 days after application under good growing conditions.

Avoid all contact, including direct spray and drift, with foliage or green tissue of desirable plants. This product is non-selective and will injure or kill all green vegetation contacted by the spray. If desirable vegetation is contacted, rinse the sprayed portion with water immediately.

Derringer F herbicide works best when weeds are actively growing. Applications may be made on a broadcast, banded, or spot treatment basis depending on the situation. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest rate recommended. 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 underground parts or seed. Refer to the *How to Apply* section of this label for the recommended rates and a list of weeds controlled.

Aerial applications of Derringer F Herbicide should be made only under the conditions specified within this label. Refer to the weed and stage of growth tables shown in the following sections for specific information.

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, polyvinyl chloride (PVC) ≥14 mils, or Vitron® ≥14 mils; shoes plus socks; protective eye-wear.

WHEN TO APPLY

Best results are obtained when weeds are actively growing. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application of the highest recommended rate.

Derringer F Herbicide 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.

Derringer F Herbicide should be applied at the rate recommended in the *How to Apply* section of this label. Repeat applications of Derringer F Herbicide or tank mixes of Derringer F Herbicide plus one or more appropriate residual herbicide(s) will be needed to control weeds emerging from underground parts or seeds.

HOW TO MIX

Mix Derringer F Herbicide 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.

USE PRECAUTIONS

1. DO NOT apply this product through any type of irrigation system.
2. DO NOT apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation.
3. Derringer F Herbicide 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.
4. DO NOT allow grazing of vegetation treated with this product.

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 F Herbicide in water at the amounts indicated in the following table:

Percent Spray	Amount of Derringer F Herbicide to make the following Volume of Spray Solution:			
	Solution	1 Gallon	25 Gallons	100 Gallons
	1%	1 ½ fl oz	2 pints	1 gallon
	1 ½ %	2 fl oz	3 pints	1 ½ gallon
	2 ½ %	3 fl oz	5 pints	2 ½ gallon
	3 %	4 fl oz	6 pints	3 gallon
	6 %	8 fl oz	12 pints	6 gallon

Determine the proper percent spray solution depending upon the weed and stage of growth as shown in the following sections. 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.

Ground Broadcast or Boom Applications

Apply 2 to 6 quarts of Derringer F Herbicide per acre in a minimum of 20 gallons of water per acre depending upon the weed species as shown in the following sections. Use adequate water and pressure to ensure thorough coverage.

Aerial Applications

Apply as a foliar treatment using a minimum of 5 gallons of water per acre to ensure thorough coverage. Do not apply when winds are gusty or under any conditions which favor drift on to desirable vegetation. Applications under conditions, which cause drift of this product, will result in damage to any 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.

Weeds Controlled by Derringer F Herbicide (Low Rate Range)

For spot- or directed-spray application:

Apply a 1% to 2 1/2 % spray solution of Derringer F Herbicide.

For broadcast application:

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

Apply 4 quarts of Derringer F Herbicide 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
marestail	shattercane
purslane	stinkgrass
shepherdspurse	windgrass
smartweed	yellow foxtail

Weeds Controlled by Derringer F Herbicide (High Rate Range)

For spot- or directed-spray application:

Apply a 3% to 6% spray solution of Derringer F Herbicide

For broadcast application:

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

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

The rates listed above will also control the weeds listed in the *Weeds Controlled by Derringer F Herbicide (Low Range)* section of this label.

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 brome
field gromwell	fescue
fleabane	guineagrass
goldenrod	Kentucky bluegrass
horsetail	nutsedge
lambsquarters	paragrass
leafy spurge	quackgrass
mugwort	ryegrass
musk thistle	sandbur
nettle	smooth brome

Broadleaf Weds
 nightshade
 pennycress
 pigweed, red root
 plantain
 prickly lettuce
 ragweed
 Russian thistle
 tansy mustard
 velvetleaf
 velvain
 Virginia cooperleaf
 white heat aster
 wild buckwheat
 wild mustard
 wild onion
 wild rose
 wild turnip
 woodsorrell
 yellow rocket

Grasses and Sedges
 torpedograss
 vaseygrass
 wheat
 wild oat

Woody Species

Derringer F Herbicide will provide control, partial control or suppression of the perennial woody weed species listed below. Apply 2 to 6 quarts of Derringer F Herbicide per acre. Use the high-recommended rates per acre of this product when conditions are not optimum for spray coverage, such as when weed growth is heavy or dense. Lower recommended rates may be used when the target species is conifer and when vegetation growth conditions allow for uniform spray coverage.

Common Name	Scientific Name
big maple	<i>Acer spp.</i>
blackberry	<i>Rubus spp.</i>
deer brush	<i>Ceanothus spp.</i>
Douglas fir	<i>Pseudotsuga menziesii</i>
evergreen huckleberry	<i>Gaylussacia spp.</i>
gallberry	<i>Ilex spp.</i>
hazel	<i>Corylus spp.</i>
honeysuckle	<i>Lonicera spp.</i>
multiflora rose	<i>Rosa multiflora</i>
oak	<i>Quercus spp.</i>
Pine	<i>Pinus spp.</i>
poison-ivy	<i>Rhus radicans</i>
poison-oak	<i>Rhus toxicodendron</i>
roundleaf greenbriar	<i>Smilax rotundifolia</i>
salmonberry	<i>Rubus spectabilis</i>
sweet gum	<i>Liquidambar styraciflua</i>
sumac	<i>Rhus spp.</i>
thimbleberry	<i>Rubus parviflorus</i>
trumpet creeper	<i>Campsis radicans</i>
varnishleaf	<i>Ceanothus spp.</i>
vine maple	<i>Acer circinatum</i>
western red cedar	<i>Juniperus spp.</i>

Tank Mix Recommendations

Derringer F Herbicide is compatible in tank mixes with many other herbicides. Follow the more restrictive label limitations and use precautions for each product. No label dosage rates should be exceeded.

Tank mix applications of Derringer F Herbicide plus the following herbicides are recommended for broad-spectrum postemergence and preemergence weed control.

Arsenal® Herbicide Applicators Concentrate
 Chopper® Herbicide

Compatibility of Derringer F Herbicide and clay-based dry flowable herbicides should be determined in a jar test before tank mixing. A quart jar compatibility test should be conducted as follows:

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, heavy oily film on the jar, or other signs of incompatibility.

WHERE TO APPLY

Conifer and Hardwood Tree Plantings

When applied as recommended on this label, this product may be used for the control of undesirable plants in site preparation prior to planting and establishment of conifer and hardwood plantations. Do not apply Derringer F Herbicide as an over-the-top broadcast spray to desirable conifer or hardwood plantings.

Site Preparation Application: Derringer F Herbicide may be used for pre-plant site preparation for the control of the weeds listed on this label in conifer and hardwood tree plantings. Seedling conifer and hardwood trees may be planted into the treated area after the restricted entry interval (REI) of 12 hours has elapsed. Refer to the *How to apply* section of this labeling for the appropriate application rates to control specific weeds.

Directed Spray Application: Derringer F Herbicide may be applied as a directed spray for conifer release in conifer plantations. Refer to the *How to Apply* section of this labeling for the appropriate application rate to control specific species.

TRADEMARK INFORMATION

Viton® is a registered trademark of DuPont Company.
Arsenal and Chopper are registered trademarks of American Cyanamid Company.
Chipco is a registered trademark of Bayer Environmental Science USA LP.
Derringer is a trademark of Bayer Environmental Science USA LP.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer or 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, because of manner of use and other factors beyond Bayer Environmental Science's control, it is impossible to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

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