432-1229	11-28-2000	
US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO.	NOV 2 8 2000
	432-1229 TERM OF ISSUANCE	NOT 2 O CHRI
	Conditional	
NOTICE OF PESTICIDE: REGISTRATION	Finale Herbicide	3
(Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)		
NAME AND ADDRESS OF REGISTRANT (Include ZIP code)	· . · · · · · · · · · · · · · · · · · ·	
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Aventis Environmental Science 95 Chestnut Ridge Road Montvale, NJ 07645	USA, LP	
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NOTE: Changes in labeling formula differing in substance f submitted to and accepted by the Registration Division prio product always refer to the above U.S. EPA registration num	or to use of the label in commerce	e. In any correspondence on this
On the basis of information furnished by the registrant, the the Federal Insecticide, Fungicide, and Rodenticide Act.	above named pesticide is hereby	Registered/Reregistered under
A copy of the labeling accepted in connection with this Re	gistration/Reregistration is retur	rned herewith.
Registration is in no way to be construed as an indorsement health and the environment, the Administrator, on his motion icide in accordance with the Act. The acceptance of any nature Act is not to be construed as giving the registrant a right to by others.  This product is registered in acceptance of any nature of acceptance of accepta	on, may at any time suspend or ca ame in connection with the regist o exclusive use of the name or to	ance! the registration of a pest- tration of a product under this to its use if it has been covered
<ol> <li>Add the phrase "EPA Registration you release the product for short and/or cite all data respond of your product when this Agent similar products to submit data.</li> <li>Submit one (1) copy of the first release the product for shipmed.</li> <li>If these conditions are not consubject to cancellation in accordance for shipment of the product constitution.</li> </ol>	nipment. equired for registration ncy requires all registration ta. nal printed labeling before ent.  mplied with, the registr ce with FIFRA section 60	Vreregistration cants of fore you cation will be (e). Your release
A stamped copy of the label is	<del>-</del>	
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PA Form 8570-6 (Rev. 5-76) PREVIOUS EDITIO	ON MAY BE USED UNTIL SUPPLY	

PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

# FINALE® HERBICIDE

# FOR NONSELECTIVE WEED CONTROL OF EMERGED WEEDS IN NONCROP AREAS

ACTIVE INGREDIENT: Glufosinate-ammonium*	***	11.53%**
OTHER INGREDIENTS:		
*CAS Number 77182-82-2 (Protected by U.S. Patent No 4,400,196)		
**Equivalent to 1.00 pound of active ingredient per U.S. gallon.	TOTAL	100.00%
FPA Reg. No. 432-XXX REEO	EPA Est. No. 4	107-IA-2

# **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 (24 HOURS/DAY)
For product inquiry information, call toll free: 1-800-331-2867.

### **FIRST AID**

If swallowed:	Call a poison control center or doctor immediately for treatment advice.	
	<ul> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told t by a poison control center or doctor.</li> </ul>	
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  $\geq$ 14 mils, nitrile rubber  $\geq$ 14 mils, neoprene rubber  $\geq$ 14 mils, polyvinyl chloride (PVC)  $\geq$ 14 mils, or Viton\*  $\geq$ 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.

To 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

FINALE® Herbicide is a nonselective water-soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds. FINALE® Herbicide 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 FINALE® Herbicide occur within 2 to 4 days after application under good growing conditions.

This product is nonselective and will injure or kill all green vegetation contacted by the spray. 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.

FINALE® Herbicide works best 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 at the highest rate recommended. Refer to the How to Apply section of this label.

#### 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.

#### **NONCROP USES**

When applied as recommended in this label, FINALE® Herbicide controls annual and perennial weeds. Refer to the *How to Apply* section of this labeling for recommended rates and a list of weeds controlled. Applications may be made on a broadcast, banded or spot treatment basis depending on the situation. Avoid direct spray or drift to desirable vegetation. 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.

#### WHEN TO APPLY

FINALE® Herbicide is a foliar-active material. 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 rate recommended. Refer to the How to Apply section of this label.

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

#### **HOW TO MIX**

"NALE® Herbicide 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.

#### **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. FINALE® 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.
- 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 using 1.5 to 4 fluid ounces per gallon of water. Mix 1.5 to 4 fluid ounces per gallon of water 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. Do not spray during windy conditions. Backpack, pump-up, and hydraulic sprayers may be used. Thoroughly clean the sprayer following use.

#### **sroadcast or Boom Applications**

Apply 2 to 6 quarts per acre depending upon the weed and stage of growth as shown in the following sections. Use a minimum of 20 gallons of water per acre with a minimum of 30-psi spray pressure.

#### **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 condition which favors 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.

#### Tank Mix Recommendations for Noncrop Uses

FINALE® 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 FINALE® Herbicide plus the following herbicides are recommended for broad-spectrum postemergence and preemergence weed control.

Arsenal®Herbicide	Factor® Herbicide	Predict® Herbicide
Barricade® 65WG Herbicide	Gallery® 75 Dry Flowable Specialty Herbicide	Surflan A.S <sup>®</sup> . Specialty Herbicide
Endurance® Herbicide	Pendulum® WDG Herbicide	Vanquish*

A compatibility test must be conducted with any potential tank mix partner with FINALE® Herbicide, 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.

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 FINALE® Herbicide.

## Weeds Controlled by FINALE® Herbicide

#### For spot application:

Apply 1.5 fluid ounces per gallon of water when the weed height or diameter is less than 6 inches. Apply 3 fluid ounces per gallon of water when the weed height or diameter is 6 inches or greater.

#### For broadcast application:

Apply 3 quarts per acre when the weed height or diameter is less than 6 inches. Apply 4 quarts per acre when the weed height or diameter is 6 inches or greater.

Broadleaf Weeds chickweed	Grasses and Sedges barnyardgrass
<sup>-l</sup> over	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 FINALE® Herbicide

For spot application:

Apply 3 fluid ounces per gallon of water when the weed height or diameter is less than 6 inches. Apply 4 fluid ounces per gallon of water when the weed height or diameter is 6 inches or greater.

#### For broadcast application:

Apply 4 quarts per acre when the weed height or diameter is less than 8 inches tall. Apply 6 quarts per acre when the weed height or diameter is 8 inches or greater.

#### **Broadleaf Weeds**

annual sowthistle

bindweed buffalobur

burdock

Canada thistle

curly dock dandelion

dogbane (hemp)

feld gromwell

tleabane

goldenrod

horsetail lambsquarters

leafy spurge

mugwort

musk thistle

nettle

nightshade

pennycress

pigweed, red root

plantain

prickly lettuce

agweed

Russian thistle

tansy mustard

velvetleaf

vervain

Virginia cooperleaf

white heath aster

wild buckwheat

wild mustard

wild onion

wild rose

wild turnip

woodsorrel

\*\*\*\*\*\*\*\*\*\*\*\*

yellow rocket

#### **Use Notes**

 Use higher rates within the recommended rate range for plant sizes listed when vegetation cover is dense or when weeds are growing under stressed conditions such as drought or when average temperatures are below 50°F.

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 improve the level of weed control.

**Grasses and Sedges** 

annual bluegrass

bahiagrass

barley

Bermudagrass

carpetgrass crabgrass

dallisgrass

downy bromegrass

fescue

guineagrass

Kentucky bluegrass

nutsedge

paragrass

quackgrass

ryegrass

sandbur

smooth bromegrass

torpedograss

vaseygrass

wheat

wild oat

#### **Use on Woody Species**

When applied as recommended, FINALE® Herbicide will provide control, partial control, or suppression of certain perennial woody weed species. Apply 2 to 6 quarts per acre. Use the higher recommended rates per acre of this product when conditions are not optimum for spray penetration, such as when vegetation growth is heavy or dense. Lower recommended rates may be used when the target species is a conifer and when vegetation growth conditions allow for uniform spray coverage.

blackberry

Rubus spp.

deer brush Douglas fir Ceanothus integerrimus
Pseudotsuga menziesii

gallberry hazel honeysuckle huckleberry llex spp. Corylus spp. Lonicera spp. Gaylussacia spp.

Acer spp.

maple multiflora rose oak pine

Rosa multiflora Quercus spp. Pinus spp.

poison ivy poison oak Toxicodendron radicans
Toxicodendron toxicarium

roundleaf greenbriar salmonberry sweet gum

Rubus spectabilis

Smilax rotundifolia

sumac

Liquidambar styraciflua

thimbleberry trumpetcreeper vine maple

Rubus parviflorus Campsis radicans Acer circinatum Thuia plicata

Western red cedar

Thuja plicata

Rhus spp.

#### WHERE TO APPLY

#### TRIMMING AND EDGING

FINALE® Herbicide may be used for trimming and edging landscape areas such as: around individual trees and shrubs, landscape beds, foundations, rences, driveways, paths, and parking areas; also on golf courses along cart paths, around sign and light posts, and around sand traps. Plants may be safely transplanted into treated areas. For control of weeds emerging from seed, the use of FINALE® Herbicide in a tank mix with preemergence herbicides is recommended. If spraying in areas adjacent to

desirable plants, use a shield made of cardboard, plywood, or sheet metal while spraying to help prevent spray from contacting foliage of desirable plants. Refer to the *How to Apply* section of this labeling for appropriate application rates to control specific weeds.

#### Recreational and Public Areas

When applied as a spot or directed spray application, this product controls annual and perennial weeds listed on this label in areas such as: airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, schools, parking lots, tank farms, pumping stations, parks, other public areas and nonfood crop areas. Refer to the *How to Apply* section of this labeling for appropriate application rates to control specific weeds.

#### **Dormant Bermudagrass**

FINALE® Herbicide may be used to control winter annual weeds in well-established ornamental dormant hybrid or common bermudagrass. Apply only when the turf is fully dormant and prior to spring green-up or severe turfgrass injury or delayed green-up may occur. For best results, apply FINALE® Herbicide at a rate of 3 to 6 quarts per acre after most weeds have germinated and are in an early growth stage. Refer to the Weeds Controlled by FINALE® Herbicide section of this label for selecting recommended rates. Applications of FINALE® Herbicide may also be used to suppress or control undesirable biennial or perennial weeds. Do not apply more than 6 quarts of FINALE® Herbicide per acre per year for this use. Avoid high volume and spot applications where spray volume exceeds 80 gallons per acre or injury or delayed green-up may occur.

#### **Ornamentals and Christmas Trees**

When applied as recommend by this label, this product may be used for the control of undesirable vegetation in site preparation prior to planting, around and within shade and greenhouses, and as a directed spray around containers and field-grown established ornamentals and Christmas trees.

DO NOT apply directly to or allow drift to contact desirable green tissue or green, thin, or uncalloused bark of desirable vegetation or injury may result. DO NOT apply FINALE® Herbicide as an over-the-top broadcast spray in ornamentals and shade or Christmas trees.

Directed spray application: FINALE® Herbicide may be applied as a directed spray to control in-row weeds in field-grown woody plants. Refer to the How to Apply section of this labeling for appropriate application rate to control specific weeds. This product may also be used between and around containers and in site preparation for new planting.

Site preparation application: This product may be used for pre-plant site preparation for the control of annual and perennial weeds listed on this label, in ornamental and Christmas tree plantings. Ornamentals and Christmas 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 appropriate application rates to control specific weeds.

Greenhouse and shade house applications: FINALE® Herbicide may be used to control weeds in greenhouses and shadehouses. Air circulation fans must be turned off during application. Apply FINALE® Herbicide as a directed spray, using large droplet and low-pressure type nozzles. Avoid drift and direct contact with desirable vegetation. Do not use in greenhouses or shade houses containing edible crops.

#### **FARMSTEADS**

When applied as recommended, this product controls undesirable plant vegetation in noncrop areas around farmstead building foundations, shelter belts, along fences, and general nonselective farmstead weed control. Refer to the *How to Apply* section of this labeling for appropriate application rates to control specific weeds. Do not allow grazing of treated vegetation.

# 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. AVENTIS Environmental Science USA, LP. All such risks shall be assumed by the user or buyer.

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Barricade and Factor are registered trademarks of Novartis Crop Protection Inc.

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Viton is a registered trademark of DuPont Company.

FINALE is a registered trademark of the Aventis Group.

Aventis Environmental Science USA LP 95 Chestnut Ridge Road Montvale, NI 07645 ACCEPTED
with COMMENTS
In EPA Letter Dated

NOV 28 2000
Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the posticide registered under EPA Reg. No.