

PM 23

45639-214

1/14/99

10/12

JAN 14 1999

Mr. Victor A. Dorr  
AgREVO USA Company  
Little Falls Centre One  
2711 Centerville Road  
Wilmington, DE 19808

Dear Mr. Dorr:

Subject: Finale<sup>®</sup> VM herbicide  
EPA Registration No. 45639-214  
Application and Letter Dated November, 1998, and  
Letter Dated January 7, 1999; Request To Amend  
Registration To Update Precautionary Statements  
and To Delete "Applications in Rights-of-ways,  
Industrial Sites, Ornamental and Christmas Tree  
Plantings"

The proposed label amendments described in the subject applica-  
tion and letters have been reviewed. The proposed label submitted  
January 7, 1999 has been reviewed and found acceptable under the  
Federal Insecticide, Fungicide and Rodenticide Act (FIFRA),  
as amended, provided that you:

1. Add the following statement following the directions for the compatibility test on page 10: "If the compatibility test shows signs of incompatibility, do not tank mix the product tested with Finale<sup>®</sup> VM Herbicide".
2. Submit one (1) copy of your final printed label prior to releasing this pesticide product for shipment under the subject label, after revision as directed in comment 1 above.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA, section 5(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the proposed label is enclosed for your records.

Sincerely yours,

CONCURRENCES Joanne L. Miller

SYMBOL					Product Manager (23)	
SURNAME					Herbicide Branch	
DATE	Enclosure	General 99A	01-14-99		Registration Division (75050)	

# FINALE<sup>®</sup> VM 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%

**TOTAL 100.00%**

\*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 45639-214

EPA Est. No. 45639-MI-001

Net Contents: 30 Gallons

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated**

**JAN 14 1999**

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

45639-214



**AgrEvo USA Company  
Little Falls Centre One  
2711 Centerville Road  
Wilmington, DE 19338**

## FIRST AID STATEMENT

- If Swallowed:** Rinse mouth thoroughly with plenty of water. Do **NOT** induce vomiting. Get medical attention immediately.
- If in Eyes:** Flush with plenty of water. Get medical attention if irritation persists.
- If on Skin:** Remove contaminated clothing. Wash skin immediately with plenty of soap and water. Get medical attention.
- If Inhaled:** Remove individual to fresh air. Get medical attention if breathing difficulty develops.

### 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 1-800-471-0660 immediately for further information.**

**In case of medical, environmental, or transportation emergencies or inquiries, call 1-800-471-0660 (24 hours/day).**

For product inquiry information, call toll free: 1-800-331-2867.

## 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<sup>®</sup>  $\geq 14$  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.  
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

Finale<sup>®</sup> VM Herbicide is a nonselective water-soluble herbicide for application as a foliar spray. When applied as recommended in this label, Finale VM Herbicide controls a broad spectrum of emerged annual and perennial grass and broadleaf weeds. Finale VM 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 nonselective and will injure or kill all green vegetation contacted by the spray. If desirable vegetation is contacted, rinse the sprayed portion with water immediately.*

Finale VM 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 Finale VM 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  $\geq 14$  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.

## 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.

Finale VM 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.

Finale VM Herbicide should be applied at the rate recommended in the *How to Apply* section of this label. Repeat applications of Finale VM Herbicide or tank mixes of Finale VM 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 Finale VM 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. Finale VM 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 Finale VM Herbicide in water at the amounts indicated in the following table:

Percent Spray Solution	Amount of Finale VM Herbicide to Make the Following Volume of Spray Solution:		
	1 Gallon	25 Gallons	100 Gallons
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

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 Finale VM 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 Finale VM Herbicide (Low Rate Range)**

For spot- or directed-spray application:

Apply a 1% to 2½% spray solution of Finale VM Herbicide.

For broadcast application:

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

Apply 4 quarts of Finale VM Herbicide per acre when the weed height or diameter is 6 inches or greater.

**Broadleaf Weeds**

- chickweed
- clover
- common cocklebur
- filaree
- jimsonweed
- kochia
- London rocket
- malva (little mallow)
- marestail
- purslane
- shepherdspurse
- smartweed

**Grasses and Sedges**

- barnyardgrass
- cupgrass
- fall panicum
- giant foxtail
- goosegrass
- green Foxtail
- Johnsongrass (rhizome)
- lovegrass
- shattercane
- stinkgrass
- windgrass
- yellow foxtail



### Weeds Controlled by Finale VM Herbicide (High Rate Range)

For spot- or directed-spray application:

Apply a 3% to 6% spray solution of Finale VM Herbicide

For broadcast application:

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

Apply 6 quarts of Finale VM 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 Finale VM Herbicide - Low Rate Range* section of this label.

#### Broadleaf Weeds

annual sowthistle  
bindweed  
buffalobur  
burdock  
Canada thistle  
curly dock  
dandelion  
dogbane (hemp)  
field gromwell  
fleabane  
goldenrod  
horsetail  
lambquarters  
leafy spurge  
mugwort  
musk thistle  
nettle  
nightshade  
pennycress  
pigweed, red root  
plantain  
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  
yellow rocket

#### Grasses and Sedges

annual bluegrass  
bahiagrass  
barley  
Bermudagrass  
carpetgrass  
crabgrass  
dallisgrass  
downy brome  
fescue  
guineagrass  
Kentucky bluegrass  
nutsedge  
paragrass  
quackgrass  
ryegrass  
sandbur  
smooth brome  
torpedograss  
vaseygrass  
wheat  
wild oat

**Woody Species**

Finale VM Herbicide will provide control, partial control or suppression of the perennial woody weed species listed below. Apply 2 to 6 quarts of Finale VM 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.

<b>Common Name</b>	<b>Scientific Name</b>
big maple	<i>Acer</i> spp.
blackberry	<i>Rubus</i> spp.
deer brush	<i>Ceanothus</i> spp.
Douglas fir	<i>Pseudotsuga mensiesii</i>
evergreen huckleberry	<i>Gaylussacia</i> spp.
gallberry	<i>Ilex</i> spp.
hazel	<i>Corylus</i> spp.
honeysuckle	<i>Lonicera</i> spp.
multiflora rose	<i>Rosa multiflora</i>
oak	<i>Quercus</i> spp.
pine	<i>Pinus</i> spp.
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>Liquidamber styraciflua</i>
sumac	<i>Rhus</i> spp.
thimbleberry	<i>Rubus parviflorus</i>
trumpet creeper	<i>Campis radicans</i>
varnishleaf	<i>Ceanothus</i> spp.
vine maple	<i>Acer eircinatum</i>
western red cedar	<i>Juniperus</i> spp.

### Tank Mix Recommendations

Finale VM 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 VM Herbicide plus the following herbicides are recommended for broad spectrum postemergence and preemergence weed control.

- Arsenal® Herbicide Applicators Concentrate
- Chopper® Herbicide

Compatibility of Finale VM 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 Finale VM Herbicide as an over-the-top broadcast spray to desirable conifer or hardwood plantings.**

**Site Preparation Application:** Finale VM 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:** Finale VM 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.

**IMPORTANT: READ BEFORE USE**

By using this product, user or buyer accepts the following conditions, warranty, 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 extreme weather conditions and soil conditions, manner of use and other factors beyond AgrEvo USA Company's control, it is impossible for AgrEvo USA Company 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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