



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

MAR 17 1994

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Nancy L. Bockrath  
ZENECA INC.  
1800 Concord Pike  
Wilmington, DE 19897

Subject: Label Amendment Submission of 08/22/93 in Response to PR Notice 93-7  
EPA Reg. No. 10182-232  
DEVIRINOL 10-G ORNAMENTAL HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

**WHAT THIS ACCEPTANCE MEANS:**

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

**WHAT YOU NEED TO DO NEXT:**

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

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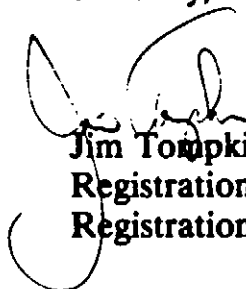
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

Attachment

ZENECA INC  
DEVIRINOL 10-G ORNAMENTAL HERBICIDE  
10182-232 08/22/93  
Original Submission

User Safety Recommendations must either be placed in a box or printed on the label in a contrasting color from surrounding text.

The Agricultural Use Requirements section must be located in a clearly separate box on the product labeling -- with lines or other graphic indicators (such as contrasting color) to separate the section from the surrounding text.

You have incorrect wording in the first paragraph in the Agricultural Use Requirements box on your proposed label. That paragraph must contain the exact wording of the paragraph shown as "2" in Section F on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

Delete the crossed-out statements on your proposed label. They are redundant statements or phrases.

Correct the typographical errors circled on your proposed label.

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**DEVIRINOL® 10-G ORNAMENTAL**  
**Selective Herbicide**

A Preemergence Herbicide for weed control in  
container-grown ornamentals, field-grown nursery stock,  
liner stock, and ground covers

DEVIRINOL 10-G controls many annual grasses and broadleaf weeds

**ACTIVE INGREDIENT:**

*N,N*-Diethyl-2-(1-naphthalenyloxy)-propionamide . . . . . 10.0%

**INERT INGREDIENTS:** . . . . . 90.0%

**TOTAL** . . . . . 100.0%

Contains 10 lbs. of active ingredient per 100 pounds

EPA Reg. No. 10182-232  
EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**MAY BE HARMFUL IF SWALLOWED**

Made in U.S.A.  
ZENECA Ag Products  
ZENECA Inc.  
Wilmington, DE 19897

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

**MAR 17 1994**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
10182-232

## STATEMENT OF PRACTICAL TREATMENT

**IN CASE OF CONTACT:** Immediately flush eyes or skin with plenty of water for at least fifteen minutes while removing contaminated clothing and shoes. Call a physician. Wash clothing before reuse.

**IF SWALLOWED:** Immediately dilute the swallowed material by giving large quantities of water and induce vomiting by gagging the victim with a finger or blunt object placed on the back of the victim's tongue. Continue fluid administration until vomitus is clear. Never give anything by mouth to an unconscious person.

**IF INHALED:** Remove to fresh air. Seek medical attention if respiratory irritation occurs.

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**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE CALL 1-800-F-A-S-T-M-E-D (327-8633)**

**FOR CHEMICAL EMERGENCY:** Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

**MAY BE HARMFUL IF SWALLOWED.** Do not breathe dust. Avoid contact with skin, eyes and clothing. ~~Wash thoroughly with soap and water after use.~~ Avoid contamination of Food and Feed.

#### Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Shoes plus socks.

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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**BEST AVAILABLE COPY**

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### 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.
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### ENVIRONMENTAL HAZARDS

Keep out of lakes, streams, and ponds. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product as specified on this label. Do not apply when weather conditions favor drift from areas treated. Do not contaminate irrigation water or water used for domestic purposes

### GENERAL PRECAUTIONS

- Read all instructions before using.
- Use only for recommended purposes and at recommended rates. Do not overdose.

**BEST AVAILABLE COPY**

## DIRECTIONS FOR USE

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

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### 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 protection 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 enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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.
- Waterproof gloves.
- Shoes plus socks.

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DEVIRINOL 10-G ORNAMENTAL does not control established weeds. It must be applied to freshly weeded soil before weeds germinate or during Fall and Winter months.

DEVIRINOL 10-G ORNAMENTAL can be applied to newly planted container stock after soil has settled from first watering, field grown nursery stock, dichondra and to established plants.

DEVIRINOL 10-G ORNAMENTAL needs mechanical incorporation (such as, power tiller), adequate irrigation or natural moisture (rainfall or snow) (1-2 inches within 2-3 days) for optimum results.

**BEST AVAILABLE COPY**

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DEVRINOL 10-G ORNAMENTAL is recommended on several different container potting soil mixtures. These mixtures include those containing 30 percent soil and/or sand and mixtures containing no soil. (Example: perlite, peat, bark, sawdust and sand.)

WEEDS CONTROLLED BY DEVRINOL 10-G ORNAMENTAL	
<b>ANNUAL GRASSES:</b>	
Barnyardgrass, Junglerice	<i>Echinochloa</i> spp.
Wild Barley	<i>Hordeum leporinum</i>
Annual Bluegrass	<i>Poa annua</i>
Bromes	<i>Bromus</i>
Cheatgrass	<i>B. secalinus</i>
Downy Brome	<i>B. tectorum</i>
Ripgut Brome	<i>B. rigidus</i>
Soft Chess	<i>B. mollis</i>
Large (Hairy) Crabgrass	<i>Digitaria sanguinalis</i>
Smooth Crabgrass	<i>Digitaria ischaemum</i>
Southwestern Cupgrass	<i>Eriochloa gracilis</i>
Foxtails	<i>Setaria</i>
Bristly Foxtail	<i>S. verticilla</i>
Giant Foxtail	<i>S. faberi</i>
Green Foxtail	<i>S. viridis</i>
Yellow Foxtail	<i>S. lutescens</i>
Goosegrass	<i>Eleusine indica</i>
Seedling Johnsongrass	<i>Sorghum halepense</i>
Wild Oats	<i>Avena fatua</i>

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WEEDS CONTROLLED BY DEVRINOL 10-G ORNAMENTAL	
Panicums	<i>Panicum</i>
Guineagrass	<i>P. Paximum</i>
Fall Panicum	<i>P. dichotomiflorum</i>
Texas Panicum	<i>P. texanum</i>
Witchgrass	<i>P. capillare</i>
Italian Ryegrass	<i>Lolium multiflorum</i>
Sandbur	<i>Cenchrus spp.</i>
Red Sprangletop	<i>Leptochloa filiformis</i>
Stinkgrass	<i>Eragrostis cilianensis</i>
<b>ANNUAL BROADLEAF WEEDS:</b>	
Carpetweed	<i>Mollugo verticillata</i>
Common Chickweed	<i>Stellaria media</i>
Coast Fiddleneck	<i>Amsinckia intermedia</i>
Filaree	<i>Erodium</i>
Groundsel	<i>Senecio</i>
Prostrate Knotweed	<i>Polygonum aviculare</i>
Lambsquarters	<i>Chenopodium album</i>
Prickly Lettuce	<i>Lactuca serriola</i>
Little Mallow*	<i>Malva parviflora</i>
Redroot Pigweed	<i>Amaranthus retroflexus</i>
Pineappleweed	<i>Matricaria matricarioides</i>
Common Purslane	<i>Portulaca oleracea</i>
Horse Purslane	<i>Trianthema portullacastrum</i>
Common Ragweed**	<i>Ambrosia artemisiifolia</i>
Annual Sowthistle	<i>Sonchus oleraceus</i>

\*From seed  
 \*\*Suppression

## RECOMMENDATIONS

**NURSERY STOCK - FIELD GROWN:** Consult list of plant species on which DEVIRINOL 10-G ORNAMENTAL can be used.

Apply DEVIRINOL 10-G ORNAMENTAL as a broadcast treatment over young nursery stock or as a directed application to larger stock either as a band or broadcast application.

Application can be made any time of the year to weed free soil; however, since DEVIRINOL 10-G ORNAMENTAL requires 1 to 2 inches of rainfall or irrigation soon after application for adequate weed control, applications should be timed to take advantage of rainfall if irrigation is not available. Fall and Winter applications will provide excellent weed control the following Spring and Summer. A thorough incorporation of DEVIRINOL 10-G ORNAMENTAL into the soil to a depth of 1 to 2 inches will provide excellent weed control with less rainfall required.

One application of DEVIRINOL 10-G ORNAMENTAL should provide adequate weed control for a growing season in temperate areas.

**CONTAINER GROWN ORNAMENTALS:** Consult list of plant species on which DEVIRINOL 10-G ORNAMENTAL can be used.

Apply DEVIRINOL 10-G ORNAMENTAL as a broadcast application over the containers. Normal irrigation or rainfall (if a Fall or Winter application is made in cold areas) should provide sufficient water for satisfactory weed control.

**HOME GROUNDS, HIGHWAY AND INDUSTRIAL ORNAMENTAL PLANTINGS:** Use an overall (broadcast) treatment over young ornamentals or as a directed application where larger plants are growing. Irrigate soon after application or apply just before expected rain. Fall through Spring applications are preferred if irrigation is not available or if application is to be made in lower Summer rainfall areas.

**GROUND COVERS:** Apply DEVIRINOL 10-G ORNAMENTAL as a broadcast treatment over the ground covers. Irrigate immediately with a minimum of 1 inch water or apply when rainfall is expected.

**DICHONDRA:** Apply DEVIRINOL 10-G ORNAMENTAL at the time of seeding, or to established dichondra including dichondra sod. Irrigate with a minimum of 1 inch of water.

## APPLICATION RATES

**ANNUAL WEEDS:** For annual grasses and broadleaf weeds apply 40 to 60 lbs. of DEVIRINOL 10-G ORNAMENTAL per broadcast acre (15 oz. to 1 lb 6 oz. per 1,000 sq. ft.).

Use the higher rate when weed populations are heavy or when broadleaves are the primary weeds.

**USE DEVTRINOL 10-G ORNAMENTAL ON THESE ORNAMENTALS AND NURSERY STOCK AND CONTAINER STOCK**

**FIELD GROWN DECIDUOUS AND EVERGREEN TREES**

Acer	Eucalyptus	Picea
Ash	Ficus	Pinus
Black Walnut	Fir	Pittosporum
Cedar	Gleditsia	Podocarpus
Citrus	Hemlock	Populus
Crataegus	Japanese Larch	Prunus
Cypress	Laburnum	Pears
Douglas Fir	Malus	Pistachios
	Olive (Olea)	
	Palm (Washingtonia robusta)	

**DECIDUOUS AND EVERGREEN SHRUBS**

Abelia	Hibiscus	Photinia
Asparagus (Sprengeri)	Hypericum	Pittosporum
Azalea	Ilex	Podocarpus
Bottlebrush	Juniperus	Pyracantha
Buxus	Ligustrum	Rhododendron
Euonymus	Nandia	Rosa
	Natal Plum	Star Jasmine
	Oleander	Taxus

**FRUIT AND NUTS**

Almond	Lemon	Pistachio
Apple	Nectarine	Plum
Apricot	Orange	Prune
Cherry	Peach	Tangerine
Filbert	Pear	Walnut
Grape	Pecan	

Strawberry (Applications should be delayed until the desired number of daughter plants have become established. Do not apply from bloom through harvest.)

**GROUND COVERS**

Ajuga	Hedera	Liriope
Carpobrotus	Hypericum	Osteosperma
Delosperma	Lantana	Pachysandra
Dichondra		Vinca
Erysimum		
Ganzania		

**CONTAINER STOCK**

Abelia  
Agapanthus  
Asparagus  
Azalea  
Bottlebrush  
Buxus  
Cedar  
Cypress  
Douglas Fir

Eucalyptus  
Euonymus  
Fir  
Hedera  
Hibiscus  
Ilex  
Juniperus  
Ligustrum  
Liriope  
Nandina

Pachysandra  
Palm (Washingtonia robusta)  
Photinia  
Pinus spp.  
Pittosporum  
Podocarpus  
Pyracantha  
Rhododendron  
Rosa  
Star Jasmine  
Thuja  
Vinca

**PERENNIAL FLOWER**

Bird of Paradise

### **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

**STORAGE:** Keep container closed when not in use. Store in a cool dry place. Do not store near seeds, fertilizer or food stuffs.

**PESTICIDE DISPOSAL:** Wash application equipment after use. Pesticide or rinsate that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures under the Resource Conservation and Recovery Act.

**CONTAINER DISPOSAL:** Dispose of bags according to approved Federal, State or local procedures under the Resource Conservation and Recovery Act.

**NOTICE TO BUYER AND USER:** Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions, or under conditions not reasonably foreseeable to Seller, and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

DEVIRINOL® is a trademark of a ZENECA Group Company.