

DEVIRINOL® 50-WP ORNAMENTAL

Selective Herbicide

A Pre-Emergence Herbicide For Weed Control In Container-Grown Ornamentals, Field-Grown Nursery Stock, Liner Stock, Ground Covers And Turfgrass

DEVIRINOL 50-WP Controls Many Annual Grasses And Broadleaf Weeds

ACTIVE INGREDIENT:

N,N-Diethyl-2-(1-naphthalenyloxy)-propionamide 50.0%

INERT INGREDIENTS:

. 50.0%
100.0%

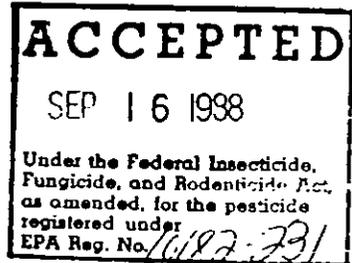
Contains 50 Pounds Active Ingredient Per 100 Pounds.

KEEP OUT OF REACH OF CHILDREN

C A U T I O N

MAY BE HARMFUL IF SWALLOWED

STATEMENT OF PRACTICAL TREATMENT



Immediately start the procedures given below. If further treatment is required, contact a Poison Center, a physician, or the nearest hospital.

If swallowed, immediately give several glasses of water and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomitus is clear. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.

For skin contact, flush all affected areas with plenty of water for several minutes. For eye contact, hold eyelids apart and flush with plenty of water for 15 minutes. Remove and clean contaminated clothing and shoes before re-use. Seek medical attention if skin or eye irritation occurs.

If inhaled, remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

FOR ADDITIONAL MEDICAL INFORMATION, CALL COLLECT, ICI AMERICAS, INC., EMERGENCY MEDICAL ASSISTANCE, (800) 327-8633 OR CHEMTREC, (800) 424-9300.

For other product information, contact your local ICI Americas, Inc. Distributor or see Product Safety Information Sheet.

_____ LBS. NET WT. _____ KG.

EPA Reg. No. 10182-231
EPA Est. No. 477-TX-1

RS-880105

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified: Country: United States Patent No.: 3,480,671; 3,718,455

Made in U.S.A. by
ICI AMERICAS, INC.
AGRICULTURAL PRODUCTS

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.

ENVIRONMENTAL HAZARDS

- .Do not apply directly to water or wetlands.
- .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 water used for domestic purposes.
- .Avoid Contamination of Food and Feed.

GENERAL PRECAUTIONS

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

GENERAL 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 through any type of irrigation system.

1. DEVIRINOL 50-WP ORNAMENTAL does not control established weeds. It must be applied to freshly weeded soil before weeds germinate or during fall and winter months.
2. DEVIRINOL 50-WP 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.
3. DEVIRINOL 50-WP 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.

4. DEVIRINOL 50-WP 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 DEVIRINOL 50-WP ORNAMENTAL

ANNUAL GRASSES:

Barnyardgrass, Junglerice	(<u>Echinochloa spp.</u>)	
Wild Barley	(<u>Hordeum leporinum</u>)	
Annual Bluegrass	(<u>Poa annua</u>)	
Bromes	(<u>Bromus</u>)	
Cheatgrass	(<u>B. secalinus</u>)	
Downy Brome	(<u>B. tectorum</u>)	
Ripgut Brome	(<u>B. rigidus</u>)	
Soft Chess	(<u>B. mollis</u>)	
Large (Hairy) Crabgrass	(<u>Digitaria sanguinalis</u>)	
Smooth Crabgrass	(<u>Digitaria ischaemum</u>)	
Southwestern Cupgrass	(<u>Eriochloa gracilis</u>)	
Foxtails	(<u>Setaria</u>)	
Bristly Foxtail	(<u>S. verticilla</u>)	
Giant Foxtail	(<u>S. faberi</u>)	
Green Foxtail	(<u>S. viridis</u>)	
Yellow Foxtail	(<u>S. tutescens</u>)	
Goosegrass	(<u>Elyusine indica</u>)	
Seedling Johnsongrass	(<u>Sorghum halepense</u>)	
Wild Oats	(<u>Avena fatua</u>)	
Panicums	(<u>Panicum</u>)	
Guineagrass	(<u>P. paximum</u>)	
Fall Panicum	(<u>P. dichotomiflorum</u>)	
Texas Panicum	(<u>P. texanum</u>)	
Witchgrass	(<u>P. capillare</u>)	.....
Italian Ryegrass	(<u>Lolium multiflorum</u>)	.....
Sandbur	(<u>Cenchrus spp.</u>)	.....
Red Sprangletop	(<u>Leptochloa filiformis</u>)	.....
Stinkgrass	(<u>Eragrostis cilianensis</u>)	.....

ANNUAL BROADLEAF WEEDS:

Carpetweed	(<u>Mollugo verticillata</u>)	.....
Common Chickweed	(<u>Stellaria media</u>)	.....
Coast Fiddleneck	(<u>Amsinckia intermedia</u>)	.....
Filaree	(<u>Erodium spp.</u>)	.....
Groundsel	(<u>Senecio spp.</u>)	.....
Prostrate Knotweed	(<u>Polygonum aviculare</u>)	.....
Lambsquarters	(<u>Crenopodium album</u>)	.....
Prickly Lettuce	(<u>Lactuca serriola</u>)	.....
Little Mallow*	(<u>Malva parviflora</u>)	.....
Redroot Pigweed	(<u>Amaranthus retroflexus</u>)	.....
Pineappleweed	(<u>Matricaria matricarioides</u>)	.....
Common Purslane	(<u>Portulaca oleracea</u>)	.....
Horse Purslane	(<u>Trianthema portulacastrum</u>)	.....
Common Ragweed**	(<u>Ambrosia artemisiifolia</u>)	.....
Annual Sowthistle	(<u>Sonchus oleraceus</u>)	.....

*From seed
**Suppression

RECOMMENDATIONSNURSERY STOCK - FIELD GROWN

Consult list of plant species on which DEVIRINOL 50-WP ORNAMENTAL can be used.

Apply DEVIRINOL 50-WP 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 anytime of the year to weed free soil; however, since DEVIRINOL 50-WP ORNAMENTAL requires 1-2 inches of rainfall or irrigation soon after application for adequate weed control, application 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 50-WP ORNAMENTAL into the soil to a depth of 1-2 inches will provide excellent weed control with less rainfall required.

One application of DEVIRINOL 50-WP ORNAMENTAL should provide adequate weed control for a growing season in temperate areas.

CONTAINER GROWN ORNAMENTALS

Consult list of plant species on which DEVIRINOL 50-WP ORNAMENTAL can be used.

Apply DEVIRINOL 50-WP 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 ORNAMENTALS 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 50-WP ORNAMENTAL as a broadcast treatment over the ground covers. Irrigate immediately with a minimum of 1 inch of water or apply when rainfall is expected.

DICHONDRA

Apply DEVIRINOL 50-WP ORNAMENTAL at the time of seeding, or to established dichondra including dichondra sod. Irrigate with a minimum of 1 inch of water.

RECOMMENDATIONS FOR USE OF DEVIRINOL 50-WP ORNAMENTAL ON
THESE ORNAMENTALS AND NURSERY STOCK AND CONTAINER STOCK

FIELD GROWN

Deciduous and Evergreen Trees

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

Deciduous and Evergreen Shrubs

Abelia	Juniperus
Asparagus (Sprengeri)	Leucothe
Aucuba	Ligustrum
Azalea	Nandina
Bottlebrush	Natal Plum
Bougainvillea	Oleander
Buxus	Osmanthus
Camellia	Photinia
Cotoneaster	Pittosporum
Crepe Myrtle	Podocarpus
Dogwood	Pyracantha
Euonymus	Raphiolepis
Forsythia	Rhododendron
Gardenia	Rosa
Heather (Calluna)	Star Jasmine
Hibiscus	Taxus
Honeysuckle (Lonicera)	Viburnum
Hypericum	Xylosema
Ilex	

Fruit & Nuts

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

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

Ground Covers

Ajuga	Iceplant
Carpobrotus	Ivy
Delosperma	Lantana
Dichondra	Liriope
Erysimum	Osteosperma
Gazania	Pachysandra
Hedera	Sedum
Hypericum	Vinca

CONTAINER STOCK

Abelia	Hibiscus
Ageratum	Ilex
Agapanthus	Juniperus
Asparagus	Leucothe
Azalea	Ligustrum
Bottlebrush	Liriope
Bougainvillea	Nandina
Buxus	Pachysandra
Camellia	Palm (Washingtonia robusta)
Cedar	Photinia
Cotoneaster	Pinus Spp.
Crepe Myrtle	Pittosporum
Cypress	Podocarpus
Dogwood	Pyracantha
Douglas Fir	Rhododendron
Eucalyptus	Raphiolepis
Euonymus	Rosa
Fir	Sedum
Forsythia	Star Jasmine
Gardenia	Thuja
Geranium	Vinca
Heather	Xylosema
Hedera	

Flowers

African Daisy	Dahlia	Narcissus
Aster	Daisy	Petunia
Bird of Paradise	Geranium	Plantain Lily (Hosta)
Chrysanthemum	Gladiolus	Zinnia

APPLICATION RATES

Annual Weeds

For annual grasses and broadleaf weeds apply 8 to 12 lbs. of DEVIRINOL 50-WP ORNAMENTAL per broadcast acre (3 to 4.4 oz. per 2 1/2 gallons water per 1,000 sq. ft.).

Use the higher rate when weed populations are heavy or when broad-leaves are the primary weeds.

RECOMMENDATIONS: TURF GRASS (FOR USE ON WARM SEASON GRASSES ONLY)

DEVIRINOL 50-WP is recommended for annual bluegrass, crabgrass and goosegrass control in the following established turf grasses: bahia, bermudagrass, centipede, St. Augustine and fescue.

TIMING OF APPLICATION:

For control of crabgrass and goosegrass, apply DEVIRINOL 50-WP at the recommended rate. Application should be made 2-3 weeks prior to weed emergence. DEVIRINOL 50-WP should be mixed with enough water to give adequate coverage of the area to be treated (but no less than 80 gallons per acre). Use a lawn type spray gun.

DEVIRINOL 50-WP requires a minimum of one half (1/2) inch of rainfall or irrigation 2-3 days after application for adequate control. If irrigation methods are not available, the timing of the application of DEVIRINOL 50-WP should be moved back several weeks to allow for some rainfall between application and weed germination.

RATES OF APPLICATION:

FOR CRABGRASS CONTROL: Apply 4 to 6 lbs. of DEVIRINOL 50-WP per acre in 80-120 gallons of water (1.5-2.25 ozs. per 2-1/2 gallons of water per 1,000 sq. ft.). Use the higher rate when applying before January 1 (not applicable north of South Carolina) or when weed infestation is expected to be heavy.

FOR GOOSEGRASS CONTROL: Apply 4 to 6 lbs. of DEVIRINOL 50-WP per acre in 80-120 gallons of water (1.5-2.25 ozs. per 2-1/2 gallons of water per 1,000 sq. ft.). Goosegrass usually starts to germinate 6 to 7 weeks after the start of crabgrass germination.

SPLIT APPLICATION FOR CRABGRASS AND GOOSEGRASS CONTROL: When both of these weeds are to be controlled, apply 4 lbs. of DEVIRINOL 50-WP spread uniformly per acre (1.5 ozs. per 1,000 sq. ft.) for crabgrass and another 4 lbs. of DEVIRINOL 50-WP per acre for goosegrass. Apply 8-10 weeks apart. Timing should be adjusted to the germination of weeds in your area. Split applications give longer and better weed control than one application.

FOR ANNUAL BLUEGRASS (POA ANNUA) CONTROL: Annual bluegrass is a winter annual in most of the warm season turf regions; therefore, application of DEVIRINOL 50-WP should be made in the fall before the annual bluegrass germinates. Apply 4-6 lbs of DEVIRINOL 50-WP per acre in 80-120 gallons of water (1.5-2.25 ozs. per 2-1/2 gallons of water per 1,000 sq. ft.).

TANK MIXTURES

Observe all cautions and limitations on labeling of all products used in combination.

Make only one application per season.

Do not contaminate water by cleaning of equipment or disposal of wastes. Apply these combinations only as specified on this label.

For a tank mixture application, apply the recommended dosage (See Directions For Use) in 80 gallons of water per acre.

GENERAL TANK MIX DIRECTIONS

Proper care must be used in preparing combination tank-mixtures to avoid incompatibility problems. Fill the spray tank at least 2/3 full of water. Start agitation and continue moderate agitation throughout mixing and application. Add, mix and disperse wettable powders first and flowable products next. Make sure each product is thoroughly wetted and dispersed prior to addition of the next product. Complete filling the tank with water, mix thoroughly, and maintain moderate agitation to provide a uniform mix during application. The tank mix combination should not be left in the spray tank for prolonged periods; batches should be mixed and applied the same day. All return lines to the tank must discharge below liquid level.

DEVIRINOL 50-WP/BETASAN 4-E COMBINATION

DEVIRINOL 50-WP may be used as a tank mix combination with BETASAN 4-E for crabgrass control in the following established turf grasses: bahia, bermudagrass, centipede, St. Augustine and fescue.

DIRECTIONS FOR USE

Apply 4 lbs. of DEVIRINOL 50-WP and 5 quarts of BETASAN 4-E per acre using a minimum of 80 gallons of water. Application should be made at least 2-3 weeks before the earliest germination date for crabgrass in your area.

The DEVIRINOL 50-WP/BETASAN 4-E combination requires a minimum of one half (1/2) inch of rainfall or irrigation 2-3 days after application for adequate control. If irrigation is not available, the application should be delayed several weeks to allow for some rainfall between application and weed germination.

TANK MIXING DIRECTIONS

Add the recommended amount of DEVIRINOL 50-WP to the spray tank while filling with water. After the DEVIRINOL 50-WP is thoroughly wetted out and dispersed in all of the water, then add the recommended amount of BETASAN 4-E and mix to provide a uniform dispersion. Apply in at least 80 gallons of water per acre.

RESEEDING: Do not reseed or overseed within six months after application.

STORAGE AND DISPOSAL

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

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

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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 user 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.