



(Stauffer Shield)

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

RECEIVED
APR 25 1975

Immediately start the procedures given below. If further treatment is required, contact a Poison Center, a physician, or the nearest hospital, or call collect, day or night: (203) 226-6602 Stauffer Chemical Company or (800) 424-9300 Pesticide Team Safety Network.

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.

_____ LBS. NET WT. _____ KG.

EPA Reg. No. 476-2175
EPA Est. No. 477-TX-1

RS-831101

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

STAUFFER CHEMICAL COMPANY
WESTPORT, CT. 06881-0850

PRECAUTIONARY STATEMENTSHAZARD 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.

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. lutescens</u>)
Goosegrass	(<u>Eleusine indica</u>)
Seedling Johnsongrass	(<u>Sorghum halepense</u>)
Wild Oats	(<u>Avena fatua</u>)
Panicums	(<u>Panicum</u>)
Guineagrass	(<u>P. Paxinum</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>Ansinckia intermedia</u>)
Filaree	(<u>Erodium spp.</u>)
Groundsel	(<u>Senecio spp.</u>)
Prostrate Knotweed	(<u>Polygonum aviculare</u>)
Lambsquarters	(<u>Chenopodium album</u>)
Prickly Lettuce	(<u>Lactuca serriola</u>)
Little Mallow*	(<u>Malva parviflora</u>)
Redroot Pigweed	(<u>Anaranthus retroflexus</u>)
Pineappleweed	(<u>Matricaria matricarioides</u>)
Common Purslane	(<u>Portulaca oleracea</u>)
Horse Purslane	(<u>Trianthema portullacastrum</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	Pinus
Cypress	Pittosporum
Dogwood	Podocarpus
Douglas Fir	Populus
Eucalyptus	Prunus
Ficus	Pears
Fir	Pistachios
Gleditsia	
Hemlock	

Deciduous and Evergreen Shrubs

Abelia	Leucothe
Asparagus (Sprengeri)	Ligustrum
Azalea	Nandina
Bottlebrush	Natal Plum
Bougainvillea	Oleander
Buxus	Photinia
Camellia	Pittosporum
Cotoneaster	Podocarpus
Dogwood	Pyracantha
Euonymus	Raphiolepis
Forsythia	Rhododendron
Hibiscus	Rosa
Hypericum	Star Jasmine
Ilex	Taxus
Juniperus	Xylosema

Fruit & Nuts

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

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

CONTAINER STOCK

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

Flowers

Bird of Paradise	Daisy	Petunia
Dahlia	Gladiolus	

APPLICATION RATES

Annual Weeds

For annual grasses and broadleaf weeds apply 8 to 12 lbs. of DIVRIROL 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 broadleaves are the primary weeds.

RECOMMENDATIONS: TURF GRASS (Southeastern States Only)

DEVIRINOL 50-WP is recommended for crabgrass and goosegrass (split application only) control in the following established turf grasses: bahia, bermudagrass, centipede, St. Augustine and fescue.

TIMING OF APPLICATION:

For control of crabgrass and goosegrass (split application only), apply DEVIRINOL 50-WP at the recommended rate (see RATES OF APPLICATION) during periods specified on TIMING AND RATE chart below. 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

SINGLE APPLICATION. For control of crabgrass, 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.

SPLIT APPLICATION. For control of goosegrass, use two applications of 4 lbs. of DEVIRINOL 50-WP sprayed uniformly per acre (1.5 ozs. per 1,000 sq. ft.). Apply 8-10 weeks apart. Timing should be adjusted to the germination of weeds in your area. The first application is for crabgrass control and the second for crabgrass and goosegrass. Split applications give longer and better weed control than one application.

DEVIRINOL TIMING AND RATE CHART

REGION	One Application		Two Applications	
	DATES	RATES* PER ACRE	DATES	RATES PER ACRE
South-Mid FL	Oct. - Dec. 31	6 lbs.	Jan. 1 - Mar. 30	4.0 + 4.0 lbs.
	Jan. 1 - Jan. 15	4-6 lbs.		
N. FL - SC	Oct. - Dec. 31	6 lbs.	Feb. 1 - April 20	4.0 + 4.0 lbs.
	Jan. 1 - Feb. 15	4-6 lbs.		
NC - VA	Feb. 15 - Mar. 15	4-6 lbs.	Mar. 1 - May 10	4.0 + 4.0 lbs.

*Where a rate range is given, use the higher rate when weed infestation is expected to be heavy.

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.

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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 foods, 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 - READ CAREFULLY

CONDITIONS OF SALE:

Stauffer (and seller) offer (s) this product for sale subject to, and buyer and all users are deemed to have accepted, the following conditions of sale and warranty which may only be varied by written agreement of a duly authorized representative of Stauffer.

WARRANTY LIMITATIONS:

Stauffer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use on the label subject to the inherent risks referred to below. Stauffer makes no other express warranties; THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY and there are no warranties which extend beyond the description on the label thereof.

INHERENT RISKS:

The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks associated with use. Buyer assumes all risks associated with use or application of this product contrary to label instructions or resulting from extraordinary weather conditions.

LIMITATION OF LIABILITY:

In no case shall Stauffer be liable for special, indirect or consequential damages resulting from the use or handling of this product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which such damages are claimed.