Reg # 10182 - 352	PM-25 TEPA REGISTRATION NO.	DATE OF ISSUANCE
U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS	10182-352	28
REGISTRATION DIVISION (#H-562) WASHINGTON, D.C. 20460	TERM OF ISSUANCE	
NOTICE OF PESTICIDE: REGISTRATION	NAKS OF PESTICIDE PRODUC	
(Under the Federal Insectivide, Fungicide,	Devrinol 50-DF	Ornamental
and Rodentisade Asit, as amended)	Herbicide	
ME AND ADDRESS OF REGISTRANT (Include ZIP code)		
T IGI Americas Inc.	-T	
Agricultural Products Wilmington, DE 19897		
L	L	
OTE: Changes in labeling formula differing in substance fr bmitted to and accepted by the Registration Division prior oduct always refer to the above U.S. EPA registration num	to use of the label in commerce	
a the basis of information furnished by the registrant, the a e Federal Insecticide, Fungicide, and Rodenticide Act.	above named pesticide is hereby	Registered/Reregistered under
copy of the labeling accepted in connection with this Reg		
egistration is in no way to be construed as an indorsement alth and the environment, the Administrator, on his motior ide in accordance with the Act. The acceptance of any na- ct is not to be construed as giving the registrant a right to y others.	n, may at any time suspend or ca me in connection with the regist	incel the registration of a pest- ration of a product under this
This product is conditionall ith FIFRA section 3(c)(7)(A) pro		ccordance
 Submit/cite all data required attains of your product units of your product units (a) when the Agency requires all products to submit such data. 	der FIFRA Section	3(c)(5) or
2. Make the labeling change ou release the product for shipm		fore you
a. Add the phrase "EPA Regi	istration No. 1018	2~352".
3. Submit five (5) copies operations of the second	or shipment. Refe	r to the A-
ATTACHMENT IS APPLICABLE		

-

.

i

If these conditions are not $\cos_2(1i)^2$ with, this registration will be subject to cancellation is accordance with FIFRA sec. 5(e). Your release for shippend of the product constitutes acceptance of these conditions.

A stamped copy of the latel is enclosed for your records.

fincerely yours,

Recert J. Taylor Product Hanager (25) Pangicide-Hermicide Dranch Peristration Division (175450)

Enclosure

RD:NTaylor:eja:04/20/92:5050000

ر Page 1 of 11 DEVRINOL 50-DF Omamental Booklet DEV000B.RSA - RS-031292A

DEVRINOL® 50-DF ORNAMENTAL Selective Herbicide

A Preemergence Herbicide for use on Container-grown Ornamentals, Field-grown Nursery Stock, Liner Stock, Ground Covers and Turfgrass

ACTIVE INGREDIENT:

N,N-Diethyl-2-(1-naphthalenyloxy)-propionamide	50%
	100%

Contains 50 lbs. of Active Ingredient per 100 lbs.

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Reg. No. 10182-EPA Est. No. _____ LB. NET WT._____Kg.

Made in U.S.A. ICI Professional Products ICI Americas Inc. Wilmington, Delaware 19897

A	C	С	E	P	Т	ED)
f A							
		••	1 7	11 I. - 1 - 1	1.53	te A.⊭. te A.⊭. Lide	
	Г	:	<u>il</u> l	8] -	353	

13

đ

4 9 13

STATEMENT OF PRACTICAL TREATMENT

Immediately start the procedures given below and contact a Poison Center, a physician, or the nearest hospital Report the type and extent of exposure, describe the victim's symptoms and follow the advice given.

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.

IF ON SKIN: Flush all affected areas with plenty of water for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if skin irritation occurs.

IF IN EYES: Immediately flush eyes with large amounts of running water for 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

IF INHALED: Remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

FOR 24-.10UR 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.

Page 3 of 11 DEVRINOL 50-DF Ornamental Booklet DEV000B.RSA - RS-031292A

٩

15

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

MAY BE HARMFUL IF SWALLOWED. CAUSES MODERATE EYE INJURY AND SKIN IRRITATIONS. Do not breathe spray mist. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after use.

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 contaminate water when disposing of equipment washwaters. Apply this product as specified on this label.

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.

Except where specifically noted, DEVRINOL[®] 50-DF ORNAMENTAL herbicide is not recommended for use on soil containing more than 10%, organic matter.

Spraying on ground heavily covered with leaves or trash may adversely affect weed control.

Do not apply to frozen ground.

6 9 13

Page 4 of 11 DEVRINOL 50-DF Ornamental Booklet DEV000B.RSA - RS-031292A

DIRECTIONS FOR USE

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

DEVRINOL 50-DF ORNAMENTAL does not control established weeds. It must be applied to freshly weeded soil before weeds germinate or during Fall and Winter months.

DEVRINOL 50-DF 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.

DEVRINOL 50-DF 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.

DEVRINOL 50-DF 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, sawdus, and sand.)

WEEDS CONTROLLED BY 8 TO 12 LBS OF DEVRINOL 50-DF ORNAMENTAL		
ANNUAL GRASSES:		
Barnyardgrass, Junglerice	Echinochloa spp.	
Foxtail Barley	Hordeum jubatum	
Wild Barley	Hordeum leporinum	
Annual Bluegrass	Poa annua	
Bromes	Bromus	
Cheatgrass	B. secalinus	
Downy Brome	B. tectorum	
Ripgut Brome	B. rigidus	
Soft Chess	B. mollis	
Canarygrass	Phalaris canariensis	
Large (Hairy) Crabgrass	Digitaria sanguinalis	
Smooth Crabgrass	Digitaria ischaemum	
Southwestern Cupgrass	Eriochloa gracilis	

Do not apply this product through any type of irrigation system.

WEEDS CONTROLLED BY 8 TO 12 LBS OF DEVRINOL 50-DF ORNAMENTAL		
Foxtail	Setaria	
Bristly Foxtail	S verticilla	
Giant Foxtail	S. laberi	
Green Foxtai	S. viridis	
Yellow Foxtail	S. lutescens	
Goosegrass	Eleusine indica	
Seedling Johnsongrass	Sorghum halepense	
Wild Oats	Avena fatua	
Panicums	Panicum	
Guineagrass	P. Paximum	
Fall Panicum	P. dichotomiflorum	
Texas Panicum	P. texanum	
Witchgrass	P. capillare	
Italian Ryegrass	Lolium multiflorum	
Sandbur	Cenchrus spp.	
Mexican Sprangletop	Leptochloa uninervia	
Red Sprangletop	LeptochUa filifornis	
Stinkgrass	Eragrostis cilianensis	
ANNUAL BROADLEAF WEEDS:		
Carpetweed	Mollugo verticillata	
Common Chickweed	Stellaria media	
Coast Fiddleneck	Amsinckia intermedia	
Cudweed, Purple	Gnaphalium purpureum	
Redstem Filaree	Erodium circutorium	
Common Groundsel	Senecio vulgaris	
Prostrate Knotweed	Polygonum aviculare	
Lambsquarters	Chenopodium album	
Prickly Lettuce	Lactuca serriola	
Little Mallow*	Malva parviflora	

Page 6 of 11 DEVRINOL 50-DF Omamental Booklet DEV000B.RSA - RS-031292A

WEEDS CONTROLLED BY 8 TO 12 LBS OF DEVRINOL 50-DF ORNAMENTAL		
Redroot Pigweed	Amaranthus retroflexus	
Pineappleweed	Matricaria matricarioides	
Common Purslane	Portulaca oleracea	
Horse Purslane	Trianthema portullacastrum	
Common Ragweed**	Ambrosia artemisiifolia	
Annual Sowthistle	Sonchus oleraceus	

*From seed

**Suppression

RECOMMENDATIONS

Nursery Stock: Field Grown

Consult list of plant species on which DEVRINOL 50-DF ORNAMENTAL can be used.

Apply DEVRINOL 50-DF 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 DEVRINOL 50-DF ORNAMENTAL requires 1 to 2 inches of rainfall or irrigation soon after application for adequate weed control, applications should be timed to take advantag, 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 DEVRINOL 50-DF ORNAMENTAL into the soil to a dept of 1 to 2 inches will provide excellent weed control with less rainfall required.

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

Container Grown Ornamentals

Consult list of plant species on which DEVRINOL 50-DF ORNAMENTAL can be used.

Apply DEVRINOL 50-DF ORNAMENTAL as a broadcast treatment 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 omamentals 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.

13

Ground Covers

Apply DEVRINOL 50-DF 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 DEVRINOL 50-DF 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 ON THESE ORNAMENTALS AND NURSERY STOCK AND CONTAINER STOCK

Field Grown Deciduous and Evergreen Trees

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

Deciduous and Evergreen Shrubs

Forsythia Gardenia Hibiscus Heneysuckle (Lonicera) Hypericum Ilex Juniperus Leucothe Ligustrum Nandia Natal Plum Oleander Osmanthus Photinia Podocarpus Pyracantha Raphiolepis Rhododendron Rosa Star Jasmine Taxus Vibumum Xylosema

5 P /

Page 8 of 11 DEVRINOL 50-DF Ornamental Booklet DEV000B.RSA - RS-031292A

Plantain Lily (Hosta)

Fruit and Nuts		
Almond	Lemon	Pistachio
Apple	Nectarine	Plum
Apricot	Orange	Prune
Cherry	Peach	Tangerine
Filbert	Pear	Walnut
	Pecan	
Grape	d be delayed until the desired n	umber of daughter plants have
	pply from bloom through harvest.	
Decome established. Do not a	pply nom bloom in ough naivest.)
Ground Covers		
Ajuga	Hedera	Liriope
Carpobrotus	Hypericum	Osteosperma
Delosperma	Iceplant	Pachysandra
Dichondra	lvy	Sedum
Erysimum	Lantana	Vinca
Ganzania		
Container Stock		
Abelia	Eucalyptus	Pachysandra
Agapanthus	Euonymus	Palm (Washingtonia robusta)
Ageratum	Fir	Photinia
Asparagus	Forsythia	Pinus spp.
Azalea	Gardenia	Pittosporum
Bottlebrush	Geranium	Podocarpus
Bougainvillea	Heather	Pyracantha
Buxus	Hedera	Rhododendron
Camellia	Hibiscus	Raphiolepis
Cedar	llex	Rosa
Cotoneaster	Juniperus	Sedum
Crepe Myrtle	Leucothe	Star Jasmine
Cypress	Ligustrum	Thuja
Dogwood	Linope	Vinca
Douglas Fir	Nandina	Xylosema
Flowers		
African Daisy	Dahlia	Narcissus
Aster	Daisy	Petunia

APPLICATION RATES

Bird of Paradise

Annual Weeds: For annual grasses and broadleaf weeds, apply 8 to 12 lbs of DEVRINOL 50-DF ORNAMENTAL per broadcast are (3 to 4.4 oz. per 2½ gallons water per 1,000 sq. ft.). Do not apply more than 8 lbs of DEVRINOL 50-DF ORNAMENTAL per acre in California. Use the higher rate when weed populations are heavy or when broadleaves are the primary weeds.

Geranium

RECOMMENDATIONS: TURF GRASS (For use on Warm Season Grasses Only)

DEVRINOL 50-DF ORNAMENTAL 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 DEVRINOL 50-DF ORNAMENTAL at the recommended rate. Application should be made 2-3 weeds prior to weed emergence. DEVRINOL 50-DF ORNAMENTAL 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.

DEVRINOL 50-DF ORNAMENTAL requires a minimum of one-half (½) inch of rainfall or irrigation 2-3 days after application for adequate control. If irrigation methods are not available, the timing of application of DEVRINOL 50-DF ORNAMENTAL 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 DEVRINOL 50-DF ORNAMENTAL per acre in 80-120 gallons of water (1.5 to 2.25 oz. per 2½ 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 DEVRINOL 50-DF ORNAMENTAL spread uniformly per acre (1.5 oz. per 1,000 sq. ft.) for crabgrass and another 4 lbs. of DEVRINOL 50-DF ORNAMENTAL per acre for goosegrass. Apply 8 to 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 DEVRINOL 50-DF ORNAMENTAL should be made in the Fall before the annual bluegrass germinates. Apply 4 to 60 lbs. of DEVRINOL 50-DF ORNAMENTAL per acre in 80 to 120 gallons of water (1.5 to 2.25 ozs. per 2½ 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 tank mixture application, apply the recommended dosage (See Directions for Use) in 80 gallons of water per acre.

Page 10 of 11 DEVRINOL 50-DF Omamental Booklet DEV000B.RSA - RS-031292A

GENERAL TANKMIX 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 tankmix 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.

DEVRINOL 50-DF ORNAMENTAL /BETASAN® 4E-LF COMBINATION

DEVRINOL 50-DF ORNAMENTAL may be used as a tankmix combination with BETASAN 4-E Herbicide for crabgrass control in the following established turf grass: Bahia, Bernudagrass, Centipede, St. Augustine and Fescue.

DIRECTIONS FOR USE

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

The DEVRINOL 50-DF ORNAMENTAL/BETASAN 4E-LF combination requires a minimum of onehalf (½) inch of rainfall or irrigation 2 to 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 DEVRINOL 50-DF ORNAMENTAL to the spray tank while filling with water. After the DEVRINOL 50-DF ORNAMENTAL is thoroughly wetted out and dispersed in all of the water, then add the recommended amount of BETASAN 4E-LF and mix to provide a uniform dispersion. Apply in at least 80 gallons of water per acre.

Reseeding: Do not seed or overseed within six months after application.

Page 11 of 11 DEVRINOL 50-DF Omamental Booklet DEV000B.RSA - RS-031292A

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: Do not reuse. 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.

IMPORTANT: Read the Entire Directions for Use and the Conditions of Sale and Warranty before using this product.

CONDITIONS OF SALE AND LIMITED WARRANTY:

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 inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller hamless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, 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 conditions or under conditions not reasonably foreseeable to or beyond the control of 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.

When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. 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.

DEVRINOL® and BETASAN® are trademarks of ICI Group Companies

DEV000.RSA

13