

# Devrinol<sup>®</sup> DF-XT

ORNAMENTAL  
HERBICIDE

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

**ACTIVE INGREDIENT**

Napropamide ..... 50%

**OTHER INGREDIENTS** ..... 50%

**TOTAL** ..... 100%

Contains 50 lbs. of Active Ingredient per 100 lbs.

EPA Reg. No. 70506-38

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

**FIRST AID**

<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical treatment, contact the Rocky Mountain Poison Center 1-866-673-6671.

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



**United Phosphorus, Inc.**  
630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406 • 1-800-438-6071

**Net Weight:** \_\_\_\_\_ **Pounds**

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

## CAUTION

Harmful if swallowed. Avoid contact with skin, clothing, or eyes. Causes moderate eye irritation. Avoid breathing spray mist.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Mixers, loaders, applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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. Pilots must use an enclosed cockpit that meets the requirements in the Worker Protection Standard.

#### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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 contaminate water when cleaning equipment or disposing of equipment wash waters.

### 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.

### General Use Precautions

Read all instructions before using.

Use only for listed purposes and at listed rates. Do not overdose.

Except where specifically noted, do not apply Devrinol® DF-XT Ornamental Herbicide to 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.

Do not contaminate irrigation water or water used for domestic purposes.

### 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 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 24 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
- Shoes plus socks
- Chemical-resistant gloves made of any waterproof material
- Eye wear

**FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, OR ILLEGAL RESIDUES.**

### GENERAL INFORMATION

Devrinol DF-XT Ornamental does not control established weeds. It must be applied to freshly weeded soil before weeds germinate, or during Fall and Winter months.

Devrinol DF-XT 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 DF-XT Ornamental needs mechanical incorporation (such as a power tiller), adequate irrigation, or natural moisture (1-2 inches of rain-fall or snow within 2-3 days) for optimum results.

Devrinol DF-XT Ornamental may be used on several different container potting soil mixtures. These mixtures include those containing 30 percent soil and/or sand, and mixtures containing no soil. (For example: perlite, peat, bark, sawdust, and sand.)

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

**WEEDS CONTROLLED BY 8 TO 12 LBS. OF  
Devrinol DF-XT Ornamental**

<b>ANNUAL GRASSES:</b>	
Barnyardgrass, Junglerice	<i>Echinochloa</i> spp.
Foxtail Barley	<i>Hordeum jubatum</i>
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>
Canarygrass	<i>Phalaris canariensis</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>
Panicums	<i>Panicum</i>
Guineagrass	<i>P. maximum</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</i> spp.
Mexican Sprangletop	<i>Leptochloa uninervia</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>
Cudweed, Purple	<i>Gnaphalium purpureum</i>
Redstem Filaree	<i>Erodium cicutarium</i>
Common Groundsel	<i>Senecio vulgaris</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 portulacastrum</i>
Common Ragweed**	<i>Ambrosia artemisiifolia</i>
Annual Sowthistle	<i>Sonchus oleraceus</i>

\*From seed

\*\*Suppression

**GENERAL SITES OF USE**

**Nursery Stock (Field Grown):** Consult list of plant species on which Devrinol DF-XT Ornamental can be used.

Apply Devrinol DF-XT 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 DF-XT 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 Devrinol DF-XT Ornamental into the soil to a depth of 1 to 2 inches will provide excellent weed control with less rainfall required.

One application of Devrinol DF-XT Ornamental should provide adequate weed control for a growing season in temperate areas.

**Container Grown Ornamentals:** Consult list of plant species on which Devrinol DF-XT Ornamental can be used.

Apply Devrinol DF-XT 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 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 Devrinol DF-XT 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 DF-XT Ornamental at the time of seeding, or to established dichondra including dichondra sod.

Irrigate with a minimum of 1 inch of water.

## SPECIFIC ORNAMENTALS, NURSERY STOCK, AND CONTAINER STOCK FOR DEVRINOL USE

### Deciduous and Evergreen Trees

Acer	Hemlock
Alder, Black	Japanese Larch
Ash	Laburnum
Balsam fir	Little leaf Linden
Birch	Malus
Birch, European White	Maple, Japanese
Black Walnut	Maple, Red
Cedar	Olive (Olea)
Citrus	Palm (Washingtonia robusta)
Crataegus	Picea
Cypress	Pin Oak
Dogwood	Pine, White
Douglas Fir	Pinus
Elm, Siberian	Pittosporum
Eucalyptus	Podocarpus
Ficus	Populus
Fir	Prunus
Gleditsia	Spruce, Colorado Blue
Golden Rain Tree	Tulip Tree
Gum, Sweet	Wisteria, Chinese

### Deciduous and Evergreen Shrubs

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

### Fruit and Nuts

Almond	Pecan
Filbert	Strawberry
Grape	

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

### Container Stock

Abelia	Hibiscus
Agapanthus	Ilex
Ageratum	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	

### Ground Covers

Ajuga	Hedera
Carpobrotus	Hypericum
Delosperma	Iceplant
Dichondra	Ivy
Erysimum	Lantana
Fern, Christmas	Liriope
Fern, Hay-scented	Osteosperma
Fern, Japanese painted	Pachysandra
Fern, Lady	Ribbon Grass
Fern, Log	Russian Sage
Fern, Royal	Sedum
Fern, Shaggy Shield	Silver sage
Gazania	Vinca

### Flowers

African Daisy	Gladiolus
Aster	Leopards Bane
Beard-Tongue	Lilly of the Incas
Bellflower, Tussock	Moss Pink
Bird of Paradise	Narcissus
Blanket Flower	Pasque Flower
Bleeding Heart	Petunia
Boltonia	Pincushion Flower
Cheddar Pink	Plantain Lily (Hosta)
Chrysanthemums	Redrocks Penastemon
Cleyera	Speedwell
Coneflower Purple	Stoncrop
Dahlia	Sun Daisy
Daisy	Sunset Hyssop
Daylilly	Yarrow, Common
Gazania	Yellow Loosestrife
Geranium	Zinnia

## APPLICATION RATES FOR SITES LISTED ABOVE

**Annual Weeds:** For annual grasses and broadleaf weeds, apply 8-12 lbs. of Devrinol DF-XT Ornamental per broadcast acre (3-4.4 oz. per 2 1/2 gallons water per 1,000 sq. ft.). Do not apply more than 4 lbs. a.i. (8 lbs. Devrinol DF-XT Ornamental) per broadcast acre (3 oz. per 2 1/2 gallons water per 1,000 sq. ft.) on almond, pecan, and grape use sites. A maximum of one application per year is allowed on almond, pecan, and grape use sites. Do not apply more than 8 lbs. of Devrinol DF-XT Ornamental per acre in California. Use the higher rate when weed populations are heavy or when broadleaves are the primary weeds, but only when the use directions above allow it.

## BULBS – FIELD GROWN

Iris	Narcissus
Daffodil	Tulip
Lilies	

**Annual Weeds:** For annual grasses and broadleaf weeds, apply 8 lbs. of Devrinol DF-XT Ornamental per broadcast acre (3 oz. per 2 1/2 gallons water per 1,000 sq. ft.) as a surface spray over newly planted bulbs after October 15, but before germination of any annual weed seeds. Apply in 20 to 100 gallons of water per acre using ground spray equipment. Do not apply more than once per season.

OR

Apply 8 lbs. of Devrinol DF-XT Ornamental per broadcast acre as a surface spray in the spring before germination of summer annual weeds. Do not apply to tulips showing more than 2 inches of top growth.

**TURF GRASS (WARM SEASON GRASSES ONLY)** Devrinol DF-XT Ornamental may be used 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 DF-XT Ornamental at the listed rate. Application should be made 2-3 weeks prior to weed emergence. Devrinol DF-XT 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 DF-XT Ornamental 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 application of Devrinol DF-XT Ornamental should be moved back several weeks to allow for some rainfall between application and weed germination.

**For Crabgrass Control:** Apply 4-6 lbs. of Devrinol DF-XT Ornamental per acre in 80-120 gallons of water (1.5-2.25 oz. per 2 1/2 gallons of water per 1,000 sq. ft.). Goosegrass usually starts to germinate 6-7 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 DF-XT Ornamental spread uniformly per acre (1.5 oz. per 1,000 sq. ft.) for crabgrass and another 4 lbs. of Devrinol DF-XT Ornamental 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 Devrinol DF-XT Ornamental should be made in the Fall before the annual bluegrass germinates. Apply 4-6 lbs. of Devrinol DF-XT Ornamental per acre in 80-120 gallons of water (1.5-2.25 oz. per 2 1/2 gallons of water per 1,000 sq. ft.).

## TANK MIXTURE

### (WARM SEASON TURF GRASSES ONLY)

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 listed 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 wetttable 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.

### Betasan® 4E Combination

Devrinol DF-XT Ornamental may be used as a tank mix combination with Betasan 4E Herbicide for crabgrass control in the following established turf grass: Bahia, Bermudagrass, Centipede, St. Augustine and Fescue.

Add the listed amount of Devrinol DF-XT Ornamental to the spray tank while filling with water. After the Devrinol DF-XT Ornamental is thoroughly wetted out and dispersed in all of the water, then add the listed amount of Betasan 4E and mix to provide a uniform dispersion. Apply in at least 80 gallons of water per acre.

Apply 4 lbs. of Devrinol DF-XT Ornamental and 5 qts. of Betasan 4E 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 Devrinol DF-XT Ornamental/Betasan 4E 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.

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

## STORAGE AND DISPOSAL

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

**Pesticide 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: Nonrefillable container. Do not reuse or refill this container.** Completely empty bag into application equipment. Then offer for recycling if available, or 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 INFORMATION READ BEFORE USING PRODUCT CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, United Phosphorus, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. 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 or United Phosphorus, Inc., and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, UNITED PHOSPHORUS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc.

Devrinol is a registered trademark of United Phosphorus, Inc.

Betasan is a registered trademark of Gowan Company.

© 2014 United Phosphorus, Inc. All rights reserved.

Rev. 1/9/09

70506-38(121609-4870)