

**GROUP 15 HERBICIDE**

**Commercial**

**Net Contents 1.81 kg, 2 kg**

# **DEVIRINOL<sup>®</sup> 50-DF**

**Selective Herbicide**

**Dry Flowable**

For use on certain Pome Fruits, Small Fruits,  
Stone Fruits, Vegetables, Container-Grown  
Ornamentals, Field-Grown Nursery Stock,  
Liner Stock, Forestry Stock and Ground Covers.

**GUARANTEE:**

Napropamide ..... 50%

**READ THE BOOKLET BEFORE USING  
KEEP OUT OF REACH OF CHILDREN**

**WARNING – EYE IRRITANT**

REGISTRATION NO. 25231  
PEST CONTROL PRODUCTS ACT

United Phosphorus Inc.  
423 Riverview Plaza  
Trenton, NJ 08611  
[www.upi-usa.com](http://www.upi-usa.com)

EPA Est. 11773-IA-01

**United Phosphorus Inc.**

## CONTENTS

NOTICE TO USER .....	2
NOTICE TO BUYER .....	2
FIRST AID .....	2
TOXICOLOGICAL INFORMATION .....	2
PRECAUTIONS .....	3
ENVIRONMENTAL HAZARDS .....	3
STORAGE .....	3
DECONTAMINATION AND DISPOSAL .....	3
PRODUCT DECONTAMINATION AND DISPOSAL ...	4
DIRECTIONS FOR USE .....	4
GENERAL USE PRECAUTIONS .....	4
GENERAL USE INFORMATION .....	4
WEEDS CONTROLLED .....	5
APPLICATIONS AND RATES .....	6
FRUIT CROPS .....	6
VEGETABLE AND FIELD CROPS .....	9
BASIL .....	9
ASPARAGUS, TOMATOES AND TOBACCO ...	9
CABBAGE, BROCCOLI, CAULIFLOWER AND BRUSSELS SPROUTS .....	11
RUTABAGAS .....	11
NOTE TO BUYER/USER .....	11
DIRECTIONS FOR USE .....	11
COLE CROPS: SEEDED CHINESE BROCCOLI, CHINESE MUSTARD CABBAGE, CHINESE RADISH; SEEDED AND TRANSPLANTED CHINESE CABBAGE (NAPPA CABBAGE); TRANSPLANTED KOHLRABI .....	11
FUZZY SQUASH .....	12
GARLIC .....	12
PEPPERS .....	12
DIRECT SEEDED PUMPKIN AND SQUASH .....	12
STRAWBERRIES .....	12
ORNAMENTALS AND FORESTRY STOCK .....	13
NURSERY STOCK-FIELD GROWN .....	13
CONTAINER GROWN ORNAMENTALS .....	14
GROUND COVERS .....	14
ORNAMENTALS AND NURSERY STOCK .....	14
APPLICATION RATES .....	15

## **NOTICE TO USER**

This control product is to be used only in accordance with the directions on this label. It is an offense under the Pest Control Products Act to use a control product under unsafe conditions.

## **NOTICE TO BUYER**

Seller's guarantee shall be limited to the terms set out on the label and subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

## **FIRST AID**

**IN CASE OF POISONING**, contact a physician or a poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**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. Never give anything by mouth to an unconscious or convulsing person. Call a physician or the nearest poison control centre immediately.

**For eye contact**, hold eyelids apart and flush with plenty of water for 15 minutes. Get medical attention.

**For skin contact**, flush all affected areas with plenty of water for several minutes. Remove contaminated clothing and shoes. Get medical attention if irritation occurs. Wash clothing before reuse.

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

Consult your local POISON CONTROL CENTRE for additional information.

## **TOXICOLOGICAL INFORMATION**

DEVIRINOL 50-DF is very low in mammalian toxicity by oral ingestion or dermal uptake. DEVIRINOL 50-DF is a moderate irritant to eyes and a mild skin irritant. DEVIRINOL 50-DF does not cause skin sensitization. Treat symptomatically.

## **PRECAUTIONS**

### **KEEP OUT OF REACH OF CHILDREN**

MAY BE HARMFUL IF SWALLOWED

- Avoid contact with skin, eyes and clothing.
- Avoid breathing dust or spray mist.
- Wear rubber gloves, boots and coveralls to minimize exposure during loading, mixing and spraying operations.
- Change clothing and gloves daily and wash thoroughly before reuse.
- Wash hands, face and arms thoroughly after handling and before eating or smoking.
- Routinely shower or bathe after work.
- Keep unprotected persons out of operating area.
- Avoid contamination of food and feed.
- Do not contaminate any body of water, including irrigation water or water used for domestic purposes.
- DO NOT APPLY BY AIR

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in U.S., contact 1-866-375-4648 or [www.cropro.org](http://www.cropro.org).

### **ENVIRONMENTAL HAZARDS**

- Keep out of lakes, streams and ponds.
- Do not contaminate water by cleaning of equipment or disposal of wastes.
- Do not apply when weather conditions favour drift from areas treated.

### **STORAGE**

Do not store near food, feed, seed or fertilizer. Keep container tightly closed when not in use. Store in a cool, dry place.

### **DECONTAMINATION AND DISPOSAL:**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial

regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

#### **PRODUCT DECONTAMINATION AND DISPOSAL**

1. Empty bag thoroughly into spray tank.
2. Make the empty bag unsuitable for further use.
3. Dispose of the bag in accordance with provincial requirements.

***IN CASE OF EMERGENCY INVOLVING  
A MAJOR SPILL, FIRE OR POISONING  
CALL 1-800-424-9300 (CHEMTREC)***

#### **DIRECTIONS FOR USE**

##### **GENERAL USE PRECAUTIONS**

- Read all label directions before using. Apply this product only as specified on the label.
- Use only for recommended purposes and at recommended rates.
- Do not overdose.
- DEVRINOL 50-DF is recommended for use on mineral soils only. Not recommended for use on soils with over 10% organic matter.
- To avoid injury to crops not specified on the label, do not plant until 12 months after the last DEVRINOL 50-DF application.
- Do not apply more than once per season.
- Spraying on ground heavily covered with leaves or trash may adversely affect weed control.
- Do not apply to frozen ground.

##### **GENERAL USE INFORMATION**

DEVRINOL 50-DF is a selective surface-applied or incorporated herbicide for use in certain types of newly planted or established crops. DEVRINOL 50-DF does not control established weeds. All weed growth and crop stubble in the fields must be thoroughly worked into the soil prior to planting. Spray equipment should be carefully calibrated before use and checked frequently during application to be sure nozzles are operating properly and are

delivering a uniform spray pattern. Apply the recommended rate of DEVRINOL 50-DF in 200 to 900 litres of water per hectare in a low pressure boom-type sprayer.

When mixing DEVRINOL 50-DF, make a slurry and add to a nearly filled spray tank with adequate agitation. This will enhance initial mixing.

Be sure the spray tank, boom and nozzle have been thoroughly flushed with clean water before use. Sufficient jet or mechanical agitation should be provided during the filling operation and during application.

Allow the pump to run several minutes before application to insure proper suspension and mixing. The suspension should not be left in the spray tank for prolonged periods; batches should be mixed and applied the same day.

**NOTE:** All rates are given on a broadcast basis. Reduce rates proportionately for band or strip treatment, using the following formula:

$$\frac{\text{Spray Band Width (cm)}}{\text{Row Width (cm)}} \times \text{Broadcast rate in Kg per hectare} = \text{kg DEVRINOL 50-DF per hectare for band treatment}$$

### **WEEDS CONTROLLED**

#### **WEEDS CONTROLLED BY 9 KG/HA DEVRINOL 50-DF - SURFACE APPLICATION**

**NOTE:** DEVRINOL 50-DF does not control established weeds.

#### **Annual Grasses:**

Annual bluegrass (*Poa annua*)  
 Barnyard grass (*Echinochloa crusgalli*)  
 Foxtail (*Setaria* spp.)  
 Large crabgrass (*Digitaria sanguinalis*)  
 Sandbur (*Cenchrus* spp.)  
 Wild oats (*Avena fatua*)

#### **Annual Broadleaf Weeds:**

Chickweed (*Stellaria media*)  
 Small-flowered mallow\* (*Malva parviflora*)  
 Annual sow-thistle (*Sonchus oleraceus*)

Groundsel (*Senecio* spp.)  
Pineapple weed (*Matricaria matricarioides*)  
Redroot pigweed (*Amaranthus retroflexus*)  
Prickly lettuce (*Lactuca scariola*)  
Prostrate knotweed (*Polygonum aviculare*)  
Purslane (*Portulaca oleracea*)  
Storks bill (*Erodium cicutarium*)  
Lamb's quarters (*Chenopodium album*)

\* From seed

**WEEDS CONTROLLED BY 2.25 TO 4.5 KG/HA  
DEVIRINOL 50-DF PREPLANT INCORPORATED  
OR POST-TRANSPLANT SURFACE APPLICATION**

**NOTE:** DEVIRINOL 50-DF does not control established weeds.

**Annual Grasses:**

Barnyard grass (*Echinochloa crusgalli*)  
Crabgrass (*Digitaria* spp.)  
Fall panicum (*Panicum dichotomiflorum*)  
Goosegrass (*Eleusine indica*)

**Annual Broadleaf Weeds:**

Carpetweed (*Mollugo verticillata*)  
Purslane (*Portulaca oleracea*)  
Lamb's-quarters (*Chenopodium album*)  
Pigweed (*Amaranthus* spp.)  
\*Common ragweed (*Ambrosia artemisiifolia*)

\*Suppression

**APPLICATIONS AND RATES**

***FRUIT CROPS***

DEVIRINOL 50-DF can be used on the following crops:

- **Newly planted or established strawberries.**
- **Established apples, grapes peaches and pears.**
- **Newly planted or established caneberries (blackberries, raspberries, boysenberries and loganberries).**
- **Newly planted apple trees.**
- **Highbush blueberries.**
- **Cultivated lowbush blueberries.**

Where recommended for use on established crops, apply DEVIRINOL 50-DF only to stands that have been established for at least one year in the field,

orchard or vineyard. Where recommended for use on newly planted crops, application may be made immediately after transplanting.

Use as a directed spray and avoid contact with fruit or foliage. Do not apply when fruit is on the ground during the harvest period. Do not graze treated areas.

To avoid injury to crops not specified on the label do not plant until 12 months after the last DEVRINOL 50-DF application.

Do not apply DEVRINOL 50-DF to frozen ground. For best results, the treatment must reach the zone of weed seed germination. If rainfall does not occur within 7 days for a spring or fall application or 2 days for a summer application (June, July and August), a shallow incorporation to a depth of 2.5 to 5 cm or an irrigation (sprinkler or flood) with sufficient water to wet the soil to a depth of 5 to 10 cm is necessary.

**Newly planted or established strawberries -** Application of DEVRINOL 50-DF should be delayed until the desired number of daughter plants have become established. Do not apply from bloom to harvest. See paragraph below.

**Established apples, grapes, peaches and pears:** See paragraph below caneberries.

**Tank Mix with GRAMOXONE®:** If the use of this tank mix is desired, add the required DEVRINOL 50-DF to the spray tank followed by the required amount of GRAMOXONE®. Apply 9 kg of DEVRINOL 50-DF plus 5.5L of GRAMOXONE® in 1100 L water per broadcast hectare as a directed spray to the base of trees and vines. Avoid contact with foliage, fruit, young growing shoots, suckers and green bark. Make only one application per season.

**Newly planted or established caneberries (blackberries, raspberries, boysenberries and loganberries):** See paragraph below.

Apply 9 kg DEVRINOL 50-DF per broadcast hectare to the soil surface for control of all weeds listed (WEEDS CONTROLLED BY 9 KG/HA). Apply in the fall through early spring prior to weed emergence.

**Newly Planted Apple Trees: Annual Grasses and some Broadleaf Weeds** - Apply 9 kg of DEVRINOL® 50-DF per broadcast hectare post transplanting of apple trees and pre-emergence to weeds. Apply as a directed spray using a low pressure herbicide sprayer. For best results, lightly incorporate or irrigate if rainfall does not occur within two days after application.

**Highbush Blueberries: Annual Grasses and some Broadleaf Weeds** - Apply one application per season of 9 kg of DEVRINOL® 50-DF per broadcast hectare in a band. Apply in the fall through early spring prior to weed emergence. Do not apply to frozen ground. Do not apply within 70 days of harvest.

**Cultivated Lowbush Blueberries: Germinating Annual Grasses and Broadleaf Weeds:** Apply 9 kg of DEVRINOL® 50-DF per broadcast hectare in late fall/early spring when blueberries are dormant. Make only one application per season. Do not apply within 70 days of harvest.

**DEVRINOL® 50-DF Tank Mixed with Residual Herbicides for Annual Weed Control**

Consult the residual herbicide labels for other directions and precautionary information.

**FIRST YEAR FRUIT TREES (NEWLY PLANTED) - APPLE, APRICOT, CHERRY, PEACH, PEAR AND PLUM.**

**Tank mix with PRINCEP® NINE-T® (simazine)** - on a per hectare basis, apply a tank mix of 7 kg of DEVRINOL® 50-DF plus 2.25 kg of PRINCEP® NINE-T® in 150 to 300 L water per hectare of sprayed soil surface. Apply preemergent with a field sprayer. Make only one application per season.

**Tank Mix with SINBAR® (terbacil)** - on a per hectare basis, apply 9 kg of DEVRINOL® 50-DF plus 600 g of SINBAR® in 150 to 300 L water per hectare of sprayed soil surface. Apply preemergent with a field sprayer. Make only one application per season.

**RASPBERRIES (BRITISH COLUMBIA ONLY):** For use on soils with a range of 8-10% organic matter. Apply a tank mix of 4 kg of DEVRINOL® 50-DF plus 412 to 837 g of SINBAR per hectare pre-emergence

to weed growth or after weed removal; for best activity apply to moist soil. If no rain occurs shortly after application, irrigate to activate the chemicals.

## **VEGETABLE and FIELD CROPS**

### **BASIL**

For control of broadleaf weeds and grasses, apply DEVRINOL® 50DF at a rate of 2.2-4.4 kg/ha in 200 to 900 L water/ha. One application per year by ground or preplant incorporated. Usual rotational crop restrictions apply.

To avoid injury to crops not specified on the label, do not plant until 12 months after the last DEVRINOL 50-DF application.

CAUTION: Use of DEVRINOL at the high label rates of application may result in temporary crop stunting or retardation however crops will outgrow the injury and yield is unaffected.

### **ASPARAGUS, TOMATOES AND TOBACCO**

To avoid injury to crops not specified on the label do not plant until 12 months after the last DEVRI-NOL 50-DF application.

#### **Asparagus (Seedlings and new Plantings)**

Apply to the soil surface 4.5 to 9 kg of DEVRINOL 50-DF per broadcast hectare preemergent to crop and weeds. Refer to WEEDS CONTROLLED lists for listed weeds and use of appropriate rate. Make only one application per season. Use the lower rate on light soils (coarse textured sandy and sandy-loam). For best results, irrigate if rainfall does not occur within two days after application.

#### **Asparagus (Established)**

Tank mix with PRINCEP® NINE-T® (simazine) - apply a tank mix of 9 to 13.4 kg of DEVRINOL 50-DF plus 1.5 to 2.75 kg of PRINCEP® NINE-T® in 150 to 300 L water per hectare. Apply preemergent to established beds with a field sprayer. Make only one application per season. Do not apply within 6 days of harvest.

**TOMATOES (Direct seeded and Transplanted)**

Apply and incorporate before planting 2.25 to 4.5 kg DEVRINOL 50-DF per broadcast hectare. Use the lower rate on light soils (coarse textured-sandy and sandy-loam). On flat-planted or bedded crops apply, before planting, to well-worked soil that is dry enough to permit thorough incorporation to a depth of 2.5 to 5 cm. Incorporate the same day as applied, using equipment which will result in uniform incorporation of the herbicide to the desired depth.

If broadleaf weeds not listed on this label become a problem during the growing season, follow with a sequential application of a registered broadleaf herbicide.

**Tobacco (Transplanted)**

Apply to the soil surface 2.25 to 4.5 kg DEVRINOL 50-DF per broadcast hectare. Use the lower rate on light soils (coarse textured-sandy and sandy-loam). Apply DEVRINOL 50-DF immediately following transplanting in a 25 to 30 cm band directly over the top of transplants, so that the treatment reaches the soil surface (See formula for band applications). For best results, lightly incorporate or irrigate if rainfall does not occur within 2 days after application.

**Post-Harvest Operations:** After harvesting or prior to planting of succeeding crops, a deep moldboard or disc plowing operation must be carried out. For banded applications, work the soil at right angles to the row.

**Rotational Crop Restrictions:** When DEVRINOL 50-DF is used on tobacco post-transplant banded, small grains may be seeded in rotation in the fall to prevent soil erosion. These grains may be stunted but not otherwise adversely affected.

**Tank Mixing** with AMBUSH® 500EC: if timing of DEVRINOL 50-DF application coincides with that of AMBUSH 500EC for insect control, a tank mix may be used. Follow directions on DEVRINOL 50-DF and AMBUSH 500EC labels for appropriate timing, rates and precautions.

**For all other labelled uses of DEVRINOL 50-DF, to avoid injury to crops not specified on the label, do not plant until 12 months after the last application of DEVRINOL 50-DF.**

**CABBAGE, BROCCOLI, CAULIFLOWER AND BRUSSELS SPROUTS (DIRECT SEEDED AND TRANSPLANTED)****(BRUSSELS SPROUTS FOR THE PROVINCE OF BRITISH COLUMBIA ONLY)**

For control of broadleaf weeds and grasses, apply DEVRINOL 50DF at a rate of 2.25 to 4.5 kg/ha pre-emergent or preplant incorporated. Use the lower rate on light soils (coarse textured-sandy and sandy-loam). One application per year by ground only, PHI 60 days. Usual rotational crop restrictions apply.

CAUTION: Use of DEVRINOL at the high label rates of application may result in temporary crop stunting or retardation however crops will outgrow the injury and yield is unaffected.

**RUTABAGAS**

Apply 2.2 - 4.4 kg/ha in 200-900 L water/ha pre-plant incorporated; broadcast. Make only one application per season. Shepherd's purse and Lady's thumb may escape treatment at this rate. Do not apply within 60 days of harvest.

**NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:**

The DIRECTIONS FOR USE for this product for the use(s) described on the Supplementary Label were developed by persons other than United Phosphorus Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. United Phosphorus Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed on this Supplementary Label.

Accordingly, the Buyer and User assume all liability arising, and agree to hold United Phosphorus, Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use(s) described on this Supplementary Label.

**DIRECTIONS FOR USE**

**COLE CROPS - Seeded Chinese broccoli, Chinese Mustard cabbage, Chinese Radish;**

*(continued)*

**Seeded and transplanted Chinese cabbage (nappa cabbage); transplanted Kohlrabi.** Apply 2.25-4.50 kg/ha in sufficient water. Apply as either pre-plant or pre-emergent; only one application per season. Do not plant subsequent crops not specified on the label until 12 months after the last application.

**FUZZY SQUASH (TRANSPLANTS ONLY)** For use in Eastern Canada only.

For the control of labelled weeds, apply DEVRINOL 50 DF at 3.0 kg/ha pre plant incorporated. Some crop stunting may be observed but this should not effect yield. DEVRINOL 50-DF requires rainfall or irrigation with sufficient water to wet the soil to a depth of 5 to 10 cm soon after application for adequate weed control. Application should be timed to take advantage of rainfall if irrigation is not available.

**GARLIC**

Apply DEVRINOL 50DF at a rate of 2.24 to 4.5 kg/ha in 200-900 litres water/ha, pre-emergent. One application per season, by ground only

**PEPPERS**

Apply DEVRINOL 50DF at a rate of 2.24 to 4.5 kg/ha pre-plant incorporated. One application per season.

**DIRECT SEEDED PUMPKIN AND SQUASH**

For the control of labelled weeds, apply 2.24-4.5 kg/ha in 200-900 L water/ha pre-emergent, ground application. Make only one application per season. Use the lower rate on light soils (coarse textured-sandy and sandy-loam). Shepherd's-purse and Lady's thumb may escape treatment at this rate. DEVRINOL 50-DF requires rainfall or irrigation with sufficient water to wet the soil to a depth of 5 to 10 cm soon after application for adequate weed control. Application should be timed to take advantage of rainfall if irrigation is not available.

**STRAWBERRIES - newly planted (British Columbia Only)**

Apply DEVRINOL 50DF at a rate of 3.0 to 4.0 kg/ha and 0.6-0.83 kg/ha of Princep® Nine-T. Apply 1-2 weeks after transplanting prior to weed emergence. One application per year, by ground application.

**ORNAMENTAL AND FORESTRY STOCK**

DEVRINOL 50-DF 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 can be applied to newly planted container grown stock after soil has settled from first watering, field grown nursery stock, and to established plants.

DEVRINOL 50-DF needs mechanical incorporation (such as power tiller), adequate irrigation or natural moisture (rainfall or snow) for optimum results. The treatment must reach the zone of weed seed germination. If rainfall does not occur within 7 days for a spring or fall application or 2 days for a summer application (June, July and August), a shallow incorporation to a depth of 2.5 to 5 cm or an irrigation (sprinkler or flood) with sufficient water to wet the soil to a depth of 5 to 10 cm is necessary.

**NURSERY STOCK - FIELD GROWN (ORNAMENTAL AND FORESTRY)**

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

Apply DEVRINOL 50-DF as a broadcast treatment over young nursery stock or as a directed spray to larger stock either as a band or broadcast application.

Application can be made anytime of the year to weed free soil. However, since DEVRINOL 50-DF requires rainfall or irrigation with sufficient water to wet the soil to a depth of 5 to 10 cm 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.

Thorough incorporation of DEVRINOL 50-DF into the soil to a depth of 2.5 - 5 cm will provide excellent weed control with less rainfall required.

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

### **CONTAINER GROWN ORNAMENTALS**

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

Apply DEVRINOL 50-DF 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.

DEVRINOL 50-DF is recommended on several different container potting soil mixtures. These mixtures include those containing 30% soil and/or sand and mixtures containing no soil. (Example: perlite, peat, bark, sawdust and sand).

### **GROUND COVERS**

Apply DEVRINOL 50-DF as a broadcast treatment over the ground covers. Irrigate immediately with sufficient water to wet the soil to a depth of 5 to 10 cm or apply when rainfall is expected. Use a boom sprayer for larger areas.

### **ORNAMENTALS AND NURSERY STOCK**

#### ***Deciduous and Evergreen Trees:***

Acer	Malus	Podocarpus
Crataegus	Picea	Populus
Gleditsia	Pinus	Prunus
Laburnum	Pittosporum	Pyrus

#### ***Deciduous and Evergreen Shrubs:***

Asparagus (Sprengeri)	Ilex	Pyracantha
Buxus	Juniperus	Hibiscus
Euonymus	Ligustrum	Rhododendron
Hypericum	Pittosporum	Rosa
	Podocarpus	Taxus

#### ***Ground Covers:***

Gazania

#### ***Container Grown:***

Agapanthus	Ilex	Pyracantha
Asparagus	Juniperus	Rhododendron
Buxus	Ligustrum	Rosa
Euonymus	Pinus	Thuja
Hedera	Podocarpus	

**APPLICATION RATES**

For control of the listed annual grasses and broadleaf weeds (**WEEDS CONTROLLED BY 9 KG/HA**) in the above **ORNAMENTALS AND FORESTRY STOCK, NURSERY STOCK, CONTAINER GROWN ORNAMENTALS** and **GROUND COVERS** use the following rates:

**Transplanted (lining out):** apply 9 kg of DEVRINOL 50-DF per broadcast hectare in 470 litres of water (90 g per 10 litres water per 100 sq. m) as soon as possible after lining out.

**Established:** apply 9 kg of DEVRINOL 50-DF per broadcast hectare in 470 litres of water (90 g per 10 litres water per 100 sq. m) late fall or early spring. DEVRINOL 50-DF may be used alone or tank-mixed with simazine 80-W at a rate of 1.37 kg per broadcast hectare for control of broadleaf weeds not listed on this label.

**Resistance-Management Recommendations**

For resistance management, DEVRINOL 50-DF is a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to DEVRINOL 50-DF and other Group 15 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field.

Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

Where possible, rotate the use of DEVRINOL 50-DF or other Group 15 herbicides with different herbicide groups that control the same weeds in a field.

Use tank mixtures with herbicides from a different group when such use is permitted.

Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers

tillage (or other mechanical), cultural, biological and other chemical control practices.

Monitor treated weed populations for resistance development. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information or to report suspected resistance, contact a company representatives at 1-800-247-1557 or at [www.upi-usa.com](http://www.upi-usa.com).

DEVRIOL, GRAMOXONE, PRINCEP, NINE T and AMBUSH are registered trademarks of a Syngenta group company.

SINBAR is a registered trademark of DuPont Canada Inc.