PULL HERE TO OPEN >



## Herbicide

For selective preemergence control of grass and broadleaf weeds in:

- established turfgrass (excluding golf course putting greens), lawns, and sod nurseries
- container, field-grown, and landscape ornamentals
- hardwood seedling nurseries
- established perennial and wildflower plantings
- Christmas tree farms

Active Ingredient:

Prodiamine*	40.7%
Other Ingredients:	59.3%
Total:	100.0%

\*CAS No. 29091-21-2

Barricade 4FL contains 4 pounds active ingredient per gallon.



## 10 gallons

**Net Contents** 



# KEEP OUT OF REACH OF CHILDREN. CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1139

EPA Est. 070989-MO-001

Product of the United Kingdom Formulated in the USA

SCP 1139A-L14 1207 246660

	FIRST AID		
If swallowed	<ul> <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 a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>		
If in eyes	<ul> <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>		
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>		
If on skin or clothing	<ul> <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>		

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

#### **HOT LINE NUMBER**

For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call

1-800-888-8372

## **PRECAUTIONARY STATEMENTS**

## **Hazards To Humans And Domestic Animals**

#### **CAUTION**

May be harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

continued...

## PRECAUTIONARY STATEMENTS (continued)

## **Personal Protective Equipment**

#### **WPS Uses:**

Applicators, mixers, loaders, and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR part 170) - in general, agricultural-plant uses are covered - must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **Engineering Control Statements**

When handlers use closed systems or enclosed cabs 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.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided with all of the PPE specified above for applicators and other handlers, and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### **User Safety Recommendations**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- After handling this product immediately remove PPE, wash yourself thoroughly and change into clean clothing.

#### **Environmental Hazards**

This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment wash water.

## 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 must be followed carefully. 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 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 SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA 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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## **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.

## 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 12 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
- Chemical-resistant gloves such as butyl rubber >14 mils or natural rubber >14 mils or neoprene rubber >14 mils or nitrile rubber >14 mils
- Shoes plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are **NOT** within the scope of the Worker Protection Standard for agricultural pesticides (40CFR part 170). The "WPS" applies when this product is used to produce agricultural plants on farms, forest or nurseries. Applicators and handlers should wear long-sleeved shirt, long pants, chemical resistant gloves, shoes with socks and protective eyewear. Thoroughly wash face and hands with soap and water after exposure and before eating or smoking. Launder exposed clothing before reuse. Do not allow reentry to treated areas until dust has settled and the turf grass or soil is dry.

## **GENERAL INFORMATION**

#### WHERE TO USE

Barricade 4FL is a selective preemergence herbicide that provides residual control of many grass and broadleaf weeds in:

 established turfgrasses (excluding golf course putting greens), lawns, and sod nurseries

- container, field-grown, and landscape ornamentals
- hardwood seedling nurseries
- established perennial and wildflower plantings
- Christmas tree farms

#### **HOW BARRICADE 4FL WORKS**

Barricade 4FL controls susceptible weeds by preventing growth and development of newly germinated weeds. Weed control is most effective when Barricade 4FL is activated by at least 0.5 inch of rainfall or irrigation or shallow incorporation (1-2 inches) before weed seeds germinate and within 14 days following application.

#### **USE PRECAUTIONS**

- 1. Do not graze or feed livestock forage cut from areas treated with Barricade 4FL.
- 2. Follow all applicable directions, restrictions, and precautions on the labels of EPA-registered tank-mix partners.
- 3. Do not blend Barricade 4FL onto dry fertilizer or any other granular material.
- 4. **Chemigation**: Do not apply this product through any type of irrigation system unless instructed otherwise in this label.
- 5. Do not apply aerially.
- 6. Do not apply to golf course putting greens.

## MIXING AND APPLICATION PROCEDURES

#### MIXING BARRICADE 4FL ALONE

Barricade 4FL must be mixed thoroughly in the spray tank to ensure uniform application. Follow these steps.

- 1. Fill the spray tank <sup>1</sup>/<sub>4</sub> full with clean water only.
- 2. Start agitation and check to ensure it is working properly.
- For tank mixing instructions, refer to the section "Mixing Order for Tank Mixtures."
- 4. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well-mixed spray suspension. If Barricade 4FL was mixed with fertilizer in the spray tank, the fertilizer may aid resuspension of Barricade 4FL if agitation is disrupted. However, it is recommended that the entire tank be used before stopping agitation.
- 5. A spray colorant may be used with Barricade 4FL to mark areas as they are treated. This will improve application accuracy by minimizing swath skips and overlaps.
- 6. Thoroughly clean the sprayer after use by flushing the system with water containing a detergent.
- 7. Refer to the **Pesticide Disposal** section of this label for waste disposal. Do not allow spray suspension to dry in the tank.

#### TANK MIXING BARRICADE 4FL

Barricade 4FL may be tank mixed with certain other EPA-registered herbicides to provide a broader spectrum of weed control or to control emerged weeds. Refer to the specific directions for use for tank-mix partners, and refer to the label(s) of the individual tank-mix partner(s) for use rate, application timing, weeds controlled, and specific precautions and/or restrictions. Tank mixes are permitted only in states where the tank-mix partner(s) are registered for the application site and the turf and ornamental species listed. When using Barricade 4FL in a tank mixture with other pesticides, follow restrictions and precautions on the labels of the products used.

Before tank mixing pesticides, test compatibility by mixing the products in a small container first. See the **Compatibility Test** section.

#### **COMPATIBILITY TEST**

Before mixing Barricade 4FL with other pesticides in the spray tank, test for compatibility by mixing all components (carrier and pesticide products) in an appropriate container in proportionate quantities. For example, 1 qt. would be 1/100 the volume of a 25 gals./A spray rate. At 1.0 lb./A, the Barricade 4FL rate would be proportional to 6 ml. per quart. Add approximately 1 teaspoon to a quart of water. (See following table.)

## Amount of Component to Add to One Quart of Spray Carrier (Assuming Carrier Volume of 25 gals./A)

	Rate Per		
Component Formulations	Acre	1,000 sq. ft.	Level Teaspoons
Barricade 4FL	21.0 ozs.	0.5 oz	1.0
Dry Tank Mix Partners	1.0 lb.	0.4 oz.	1.5
Liquid Tank Mix Partners	1.0 pt.	0.4 oz.	0.5

If components do not ball-up or form flakes, sludge, gels, oily films, or layers, then the mixture is compatible. Let the mixture stand for 15 minutes. Incompatibility will usually occur within 5 minutes after mixing. If components are not compatible, use a compatibility agent and rerun the test to determine if the mixture is suitable. If the components are still not compatible, do not tank mix.

### MIXING ORDER FOR TANK MIXTURES

**Notes:** (1) When mixing Barricade 4FL with other components (carrier and partner pesticide products), allow products to completely dissolve between steps. (2) Maintain agitation throughout mixing and application of the mixture.

#### Add the products to the spray tank in the following order:

- 1. Add products packaged in water-soluble bags first. Agitate the tank mixture. Allow the water-soluble bags to completely dissolve and the products to disperse before adding any other tank-mix partners.
- Then add water-dispersible granules (WDG or WG formulations) and wettable powders (WP formulations). Add wettable powders to the tank as agitation continues. Allow the product to disperse completely before other products are added.
- 3. Add spray adjuvants and spray markers. Read the adjuvant's label first and use only those adjuvants approved for application to turf and ornamentals.
- 4. Add Barricade 4FL, other flowable liquids (FL) or suspension concentrates (SC).
- 5. Add emulsifiable concentrates (EC) last.

#### **APPLICATION**

Apply Barricade 4FL in a minimum of 20 gals./A (0.5 gal./1,000 sq. ft.) of carrier (water and/or fluid fertilizer) using a calibrated, low-pressure sprayer with 50-mesh or coarser screens. A broadcast boom or handheld wand designed for herbicide or insecticide application will provide the best results. Select nozzle pressure and gallonage to provide complete coverage.

## SPECIFIC USE DIRECTIONS

#### **ESTABLISHED TURF**

Barricade 4FL is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turfgrasses including:

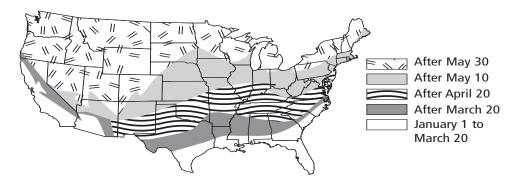
- Golf courses excluding putting greens
- Lawns
- Sod nurseries

The maximum amount of Barricade 4FL that may be applied per year is given for each turfgrass species in the **Annual Use Rates** section of this label.

For optimum weed control, Barricade 4FL should be activated by at least 0.5 inch of rainfall or irrigation before weed seeds germinate and within 14 days following application. See the map below for approximate crabgrass seed germination dates.

## **Crabgrass Seed Germination Dates**

Approximate Date



## Use Precautions - Turfgrass: Golf Courses, Lawns, and Sod Nurseries

- 1. Do not apply Barricade 4FL to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are desirable species.
- 2. Do not cut (harvest) treated sod before 90 days after application. To avoid turfgrass injury, do not apply to newly set sod until the sod has rooted and exposed edges have filled in.
- 3. To avoid turfgrass injury do not apply Barricade 4FL to turf stressed by conditions such as drought, low fertility, or pest damage.
- 4. Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control.
- 5. Do not apply Barricade 4FL to golf course putting greens.
- 6. If you consistently mow creeping bentgrass at a height of less than 0.5 inch do not apply Barricade 4FL.

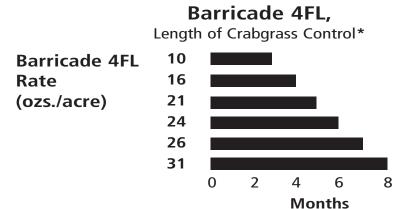
### Application Timing And Rate - Turfgrass

Barricade 4FL may be applied as a single application or in sequential applications to control weeds germinating throughout the year. All applications must be made before target weeds germinate because **Barricade 4FL will not control weeds that have already emerged.** 

The amount of Barricade 4FL to apply depends upon:

- 1. the length of residual weed control desired (the higher the application rate, the longer the control),
- 2. the turf species,
- 3. the maximum amount which can be applied to the turf species per calendar year.

(See the next 2 tables.)



<sup>\*</sup>Length of control varies by region. This table is an average.

### **Annual Use Rates – Turfgrass**

Barricade 4FL can be applied to the turfgrass species listed in the following table. **Note:** Do not apply more than the highest rate listed for each species in a calendar year.

Maximum Application Rate of Barricade Per Calendar Year by Turf Species			
Turf Species	Oz. Product/A	Oz. Product/1,000 sq. ft.	
Bermudagrass <sup>2</sup> Bahiagrass Centipedegrass Kikuyugrass Seashore Paspalum St. Augustinegrass <sup>3</sup> Tall Fescue (including turf-type) Zoysiagrass	21-48 <sup>1</sup>	0.5-1.1	
Buffalograss Kentucky Bluegrass Perennial Ryegrass	10-30 <sup>1</sup>	0.23-0.70	
Fine Fescue	10-24 <sup>1</sup>	0.23-0.55	
Creeping Bentgrass (0.5 inch or more in height <sup>4</sup> )	10-21 <sup>1</sup>	0.23-0.48	

<sup>&</sup>lt;sup>1</sup>Barricade 4FL may be applied more than once a year as long as the total amount applied is not greater than the maximum application rate for each turf species. All applications must be made before weed seeds germinate.

<sup>&</sup>lt;sup>2</sup>May be used on newly sprigged or plugged bermudagrass at rates not to exceed 17 ozs./A (0.39 oz./1,000 sq. ft.). Newly sprigged or plugged bermudagrass stolon rooting may be temporarily inhibited.

<sup>&</sup>lt;sup>3</sup>Use an initial rate of 16-32 ozs./A per application.

 $<sup>^4\</sup>mathrm{To}$  avoid grass injury, do not apply Barricade 4FL to creeping bentgrass mowed at less than 0.5 inch in height.

#### Weeds Controlled

When used as directed in this label, Barricade 4FL will control the following weeds:

Barnyardgrass

Bluegrass, Annual (Poa annua)1

Carpetweed

Chickweed, Common<sup>2</sup>

Chickweed, Mouseear (from seed)

Crabgrass (Large, Smooth)<sup>3</sup>

Crowfootgrass Cupgrass, Woolly Foxtails, Annual Goosegrass<sup>5</sup> Henbit<sup>2</sup> Itchgrass

Johnsongrass (from seed)

Junglerice

Junglerice

Knotweed<sup>2</sup>

Kochia

Lambsquarters, Common

Lovegrass

Panicum, (Texas, Fall, Browntop)

Pigweed

Purslane, Common Pusley, Florida Rescuegrass<sup>4</sup> Shepherdspurse<sup>2</sup> Signalgrass, Broadleaf Speedwell, Persian Sprangletop Spurge, Prostrate

Witchgrass

Woodsorrel, Yellow (from seed)

- <sup>2</sup>To control this weed, apply Barricade 4FL in late summer, fall, or winter before weeds germinate.
- <sup>3</sup> Fall Applications for Spring Crabgrass Control in Cool-Season Grasses: In those areas where the ground freezes in the winter, Barricade 4FL can be applied in the fall at rates of 21-24 ozs./A after soil temperatures fall below 50°F, but before the ground freezes. This application will control crabgrass the following spring.
- <sup>4</sup>Suppression only.

## When to Apply Barricade 4FL After Overseeding Turf

Injury to desirable seedlings is likely if Barricade 4FL is applied before the secondary roots of seedlings are in the second inch of soil, not thatch plus soil. To reduce the potential to injure overseeded turf, wait 60 days after seeding or until after the second mowing, whichever is longer, before applying Barricade 4FL.

<sup>&</sup>lt;sup>1</sup> In those areas where *Poa annua* is a winter annual, apply Barricade 4FL (see rate table) in August or September to established, non-overseeded turf before *Poa annua* seeds germinate. These timings are approximate. Consult State Extension Service for more specific timing for your area. Also see the section of this label *Poa annua* Control in Established Bermudagrass Overseeded with Perennial Ryegrass (AZ, CA, NV, and TX Only)

<sup>&</sup>lt;sup>5</sup>In many areas a single application of 21-48 ozs./A of Barricade 4FL will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, weed control will be most effective by making an initial application of 21-26 ozs./A followed by a second application 60-90 days later. Note: Do not exceed the maximum rate for the turf species listed in the Maximum Application Rates Table.

### When to Overseed After Application - All States

Barricade 4FL will inhibit the development of turfgrass species overseeded too soon after application. Follow rates and intervals in the table below for best overseeding/reseeding results.

\*Note: In AZ, CA, NV, and TX the overseeding interval can be shorter in established bermudagrass that has been overseeded with perennial ryegrass. See the next section, *Poa Annua* Control in Established Bermudagrass Overseeded with Perennial Ryegrass (AZ, CA, NV, and TX only).

Amount of Barricade 4FL	Interval (Months Before Overseeding)*		
Ozs. Product/A	North	Transition	South
16	4	4	4
21	5	4	4
24	6	5	5
26		6	6
31		7	7
36			9
42			10
48			12

## Poa Annua Control in Established Bermudagrass Overseeded with Perennial Ryegrass (AZ, CA, NV, and TX only)

Use on golf courses (excluding golf course putting greens), lawns, and sod nurseries when overseeding with perennial rye grass. (Minimum seeding rate of 350 lbs./A.)

## **How Much Barricade 4FL and When to Apply**

Amount to Apply	When to Apply	Expected Control	Use Precautions
12-21 ozs./A*	6-8 weeks before ryegrass overseeding second	1 application for 70% or greater control of <i>Poa</i> <i>annua</i>	Some seedling     mortality and temp-     orary reduction in     root growth of new     seedlings may occur.
	application: 4-8 weeks after overseeding or when perennial ryegrass roots are in the second inch of soil	second application may enhance control	2. To reduce the potential for seedling mortality maintain a moist seedbed with light, frequent irrigation.

## How Much Barricade 4FL and When to Apply (continued)

Amount to Apply	When to Apply	Expected Control	Use Precautions
12-21 ozs./A*	6-8 weeks before ryegrass overseeding second	1 application for 70% or greater control of <i>Poa</i> <i>annua</i>	3. Make no more than 2 applications per year for this use, and do not exceed a total of 27 ozs./A per year.
	application: 4-8 weeks after overseeding or when perennial ryegrass roots are in the second	second application may enhance control	4. Do not make a second application if any injury to the ryegrass is observed after the first application.
	inch of soil		5. Do not make a second application unless the product was first applied before overseeding.

<sup>\*</sup>The amount of Barricade 4FL to apply depends upon: the length of residual control desired (the higher the application rate, the longer the control). Note: The higher the rate, the greater the potential for seedling mortality.

## CONTAINER, FIELD-GROWN, AND LANDSCAPE ORNAMENTAL PLANTINGS (INCLUDING CHRISTMAS TREE FARMS)

## **Application, Timing, and Information**

#### **Barricade 4FL:**

- 1. Will not control emerged weeds.
- 2. May be applied to newly-transplanted and established ornamentals as a broadcast or over-the-top spray.
- 3. Is most effective when applied to soil free of clods, weeds, and debris such as leaves and mulch.
- 4. Is most effective when the product is activated in the soil before weed seeds germinate and within 14 days after application.
- 5. Is activated when the treated area receives at least 0.5 inch of irrigation or rainfall, or shallow (1 to 2 inches) mechanical incorporation.

#### **Use Precautions**

## To reduce injury potential:

- 1. Direct application of Barricade 4FL to rapidly growing tissue or buds may injure desirable plants. In the spring when buds are rapidly growing and expanding, over-the-top application of Barricade 4FL may injure new growth of desirable plants, however, these effects are temporary. To reduce the possibility of injury at this time, wait to apply Barricade 4FL over the top of newly emerged vegetation until it has hardened off, unless your experience indicates that the ornamental plant will not be injured by the over-the-top application.
- 2. After application immediately apply overhead irrigation to the foliage to wash Barricade 4FL from plant surfaces onto soil (watering the foliage of plants before application may improve the washing process).

## Ornamental and Christmas Tree Farms - Application Sites and Instructions

Site	Application Instructions
Newly-Transplanted Container or Field Nursery Stock	<ol> <li>Delay application until soil has settled around transplants.</li> <li>Water transplants thoroughly before application.</li> <li>Apply after cuttings form roots and are established.</li> <li>To avoid inhibition of the tissue union, apply before budding/grafting or after buds/grafts have taken.</li> </ol>
Established Container, Field Nursery Stock, or Landscape Plants	Apply at any time as a broadcast, over-the-top, or directed spray.
Landscape (or Ornamental) Plantings	<ol> <li>Apply as a broadcast, over-the-top, or as a directed spray.</li> <li>Delay applications to newly transplanted ornamentals until soil has settled around transplants.</li> </ol>
Bare Ground Application for Container Placement	<ol> <li>Apply to soil (including mulch, gravel, wood chips, or other permeable base) upon which containerized ornamentals are placed.</li> <li>After Barricade 4FL is applied, perform shallow cultivation or hand weeding only, to avoid disturbing the herbicide barrier.</li> </ol>
In Shadehouses and Uncovered Polyhouses	<ol> <li>After Barricade 4FL is applied, uncovered poly- houses must remain open for at least 7 days and ornamentals must receive 2 irrigations totaling at least <sup>1</sup>/2 inch of water before covering.</li> </ol>
Ornamental Bulbs and Perennial Wildflower Plantings	<ol> <li>Barricade 4FL may be applied to bulbs or perennial wildflower species listed in the section. Apply before or after bulbs emerge but before bulbs bloom and weeds emerge.</li> <li>In wildflowers, a postemergence herbicide labeled for wildflowers may be needed to control weeds that have already emerged.</li> </ol>

### **How Much Barricade 4FL and When to Apply – Ornamentals**

Amount to Apply (Broadcast)*	When to Apply	Comments/Instructions
21–48 ozs./A or	In fall or spring before weeds germinate or after weeds are removed.	Use the higher rate for longer control.     Barricade 4FL may be applied more than once
0.5–1.1 ozs./ 1,000 sq. ft.	weeds are removed.	per year as long as the total amount of product applied does not exceed 48 ozs./A per year.

<sup>\*</sup>NOTE: For band application, calculate amount per acre:

Band width in inches
Row width in inches

x broadcast rate = amount to apply/acre of field

#### **Equivalent Measurements for Barricade 4FL**

ozs./A	ozs./1,000 sq. ft	Approximate Equivalent – Tablespoons/1,000 sq. ft.
21	0.5	1.0
31	0.7	1.5
42	1.0	2.0
48	1.1	2.25

#### **Tank Mixtures For Use On Ornamentals**

Barricade 4FL may be tank mixed with other registered herbicides listed on this label to provide a broader spectrum of weed control or to control emerged weeds. Tank mixes with Barricade 4FL are for use only in states where the tank-mix partner(s), application site and intended use pattern are registered.

Follow the label directions of the tank-mix partner(s) for application rates, timing, weeds controlled, tolerant ornamentals, and specific use precautions and/or restrictions. Before combining a tank-mix partner in the spray tank, test for compatibility as described on this label.

Tank Mix Partners for Barricade 4FL on Ornamentals

Product	Precautions/Instructions
Goal® (use on conifers only)	Mix with Barricade 4FL for postemergence control of certain broadleaf weeds including malva and filaree.
Gallery <sup>®</sup> , Princep <sup>®</sup> , Pennant Magnum <sup>®</sup>	See product labels for weed spectrum and tolerant ornamentals.
Touchdown Pro®, Roundup® or other glyphosate-based products, Finale®	<ol> <li>These nonselective tank-mix herbicides control many emerged annual broadleaves and grasses.</li> <li>Take extreme care to prevent tank mixtures with these partner products from contacting the foliage and stems of turfgrass, trees, shrubs, or other desirable vegetation because desirable vegetation may be severely injured or killed. Apply these tank mixtures as a directed spray and use a shield to prevent spray from contacting foliage of desirable plants.</li> <li>Following instructions on the tank-mix partner's label, delay irrigation of the treated area to allow time for the herbicide to be absorbed by weed foliage.</li> </ol>

## **Tolerant Ornamental Species**

The species listed below in Table 1 are tolerant to Barricade. Barricade 4FL may be used for application, except in CA, to the species in Table 2. Barricade 4FL may be applied over the top of the listed species. The species that are not tolerant to Barricade when grown in containers are indicated.

When plants are under stress (such as heat, drought, or frost damage), some cultivars of listed plants may be sensitive to Barricade 4FL.

**Table 1. Tolerant Ornamental Species - All States** 

Common name
Fir species**
(Balsam, Fraser, Noble, etc.)
Japanese Maple
Norway Maple
Kiwi*
Lily-of-the-Nile (African Lily)
Vine Hill Manzanita
Cape Weed
Japanese Aucuba
Barberry
Wintergreen Barberry
Mentor Barberry
Japanese Barberry
Warty Barberry
Japanese Boxwood
Weeping Bottlebrush
Scotch Heather
Hottentot Fig (Ice Plant)

#### Scientific name

Cassia artemisioides Ceanothus rigidus Chamaecyparis pisifera Cleyera japonica Citrus spp. Cornus florida Cornus stolonifera Cortaderia selloana Cotoneaster apiculatus Cotoneaster buxifolius Cotoneaster dammeri Cotoneaster microphyllus Crataegus spp. Cupressus sempervirens Delosperma alba Dodonea viscosa Elaeagnus pungens

Euonymus fortunei

Euonymus japonica

Euonymus kiautschovicka Fatsia japonica Forsythia intermedia Forsythia viridissima Gardenia jasminoides Gladiolus spp. Hedera helix Hibiscus Hibiscus Rosa-sinensis Ilex cornuta Ilex crenata Ilex opaca Ilex pernyi Ilex vomitoria Iris spp. Jasminium nudiflorum Juniperus chinensis Juniperus conferta Juniperus horizontalis Juglans spp. Justicia brandegeana Lagerstromia indica Liqustrum amurense Ligustrum japonicum Ligustrum lucidum Liriope muscari Lonicera japonica Lonicera tatarica Magnolia spp.

Maleophora luteola

Malus spp.

#### Common name

Feathery Cassia Wild Lilac **False Cypress** Cleyera Citrus species\* Flowering Dogwood American Dogwood Pampas Grass Cranberry Cotoneaster Cotoneaster

Bearberry Cotoneaster Rockspray Cotoneaster

Hawthorne Italian Cypress

White Trailing Ice Plant

Hop Bush Silverberry Wintercreeper

Japanese Spindle Tree (Evergreen Euonymus) Spreading Euonymus Japanese Aralia Border Forsythia Greenstem Forsythia Gardenia, Cape-Jasmine Gladiolus species \* \*

**English Ivy** 

Rose of Sharon\*\* Chinese Hibiscus\*\* Chinese Holly\*\* Japanese Holly American Holly

Holly

Yaupon Holly Iris species\* Winter Jasmine Chinese Juniper Shore Juniper Creeping Juniper Walnut\* Shrimp Plant Crape Myrtle

Amur Privet Japanese Privet Glossy Privet (Wax-Leaf)

Big Blue Lillyturf Japanese Honeysuckle Tatarian Honeysuckle Magnolia species \* \*

Ice Plant Crabapple\*

continued...

Table 1. Tolerant Ornamental Species - All States (continued)

#### Scientific name

## Common name

Nandina domestica Narcissus spp. Nerium spp. Olea europaea Ophiopogon japonicus Osteospermum fruticosum Oxydendrum arboreum Persea americana Photinia fraseri Picea spp.

Pieris japonica
Pinus brutia
Pinus canariensis
Pinus elliottii
Pinus halepensis
Pinus nigra
Pinus palustrus
Pinus radiata
Pinus strobus
Pinus sylvestris
Pinus taeda
Pinus virginiana
Pistacia spp.

Pistacia spp.
Pittosporum rhombifolium
Pittosporum tobira
Podocarpus macrophyllus
Prunus laurocerasus
Prunus spp.

Pseudotsuga menziesii Pyracantha coccinea Pyracantha fortuneana Pyracantha koidzumii Pyrus spp.

Pyrus spp. Quercus rubra Raphiolepsis indica Rhododendron (including Azalea)

Rosa banksiae Rosmarinus officinalis Rumohra adiantiformis Santolina virens Sedum album Syzygium paniculatum Taxus cuspidata

Taxus media

Heavenly Bamboo Narcissus species\*\* Oleander Olive\* Mondo Grass\*\* Trailing African Daisy Sourwood Avocado\*

Frasier's Photinia (Redtip)

Spruce species\*\*

(Colorado Blue, Norway, etc.) Lily-of-the-Valley Shrub

Calabrian Pine Canary Island Pine Slash Pine

Aleppo Pine Austrian Black Pine Longleaf Pine

Monterey Pine Eastern White Pine Scotch Pine Loblolly Pine

Japanese Black Pine

Virginia Pine Pistachio\*

Queensland Pittosporum Japanese Pittosporum

Japanese Yew English Laurel

Almond, Apricot, Nectarine, Peach, Plum and Prune\*

Douglas Fir\*\* Firethorn Scarlet

Firethorn Firethorn

Bradford Pear spp. Oak species Indian Hawthorne

'Coral Bells' 'Formosa' 'Hino-crimson' 'PJM'

'Roseum Elegans' Lady Bank's Rose

Rosemary\* Leatherleaf Fern

Stonecrop

Japanese Boxcherry

Japanese Yew

Yew

Scientific name	Common name
Thuja occidentalis	American Arborvitae
Trachelospermum asiatum	Star Jasmine
Tsuga canadensis	Canada Hemlock
Tulipa spp.	Tulip species
Viburnum japonicum	Japanese Viburnum
Viburnum odoratissimum	Sweet Viburnum
Viburnum plicatum	Japanese Snowball
Viburnum rigidum	Canary Island Viburnum
Viburnum tinus	Laurustinus
Viburnum trilobium	Cranberry Bush
Viburnum wrightii	Leatherleaf Viburnum
Vinca major	Vinca
Vinca minor	Dwarf Periwinkle
Vitis spp.	Grape*
Weigėla florida	Old Fashioned Weigela
Yucca aloifolia	Spanish Bayonet
Yucca filamentosa	Yucca, Adam's Needle

<sup>\*</sup>Do not use on food producing trees, vines, or plants.

\*\*Not for use on container grown plants.

Table 2. Tolerant Ornamental Species/Varieties - All States Except CA

Scientific name	Common name
Abelia grandiflora	Abelia: Sherwood
Achillea spp.	Yarrow: King Edward
Agapanthus orientalis	
Akebia quintata	Five-Leaf or Chocolate Vine
Allium cernuum	Lady's Leek, Nodding Onion
Anemone hybrida	Japanese Anemone
Aquilegia spp.	Aquilegia: Red and Gold
Artemisia spp.	Wormwood; Silver Mound, Castle
Aster spp.	Aster: Bonny Blue, Purple Dome
Aster X frikartii	
Athyrium filix-femina	Lady Fern; Fern Lady
Begonia spp.	Fibrous Begonia: Hardy Grandis
Bergenia cordifolia	
Boltonia asteroides	Snowbank
<i>Bougainvillea</i> spp.	Bougainvillea
Buddleia davidii	Butterfly-Bush (Dwarf Blue); Royal Red
Callistemon citrinus	Crimson Bottlebrush
Campanula carpatica	Tussock Bellflower; (White Clips)
Campis X tagliabuana	Trumpet Creeper, Trumpet Flower; Madame Galen
Ceratostigma plumbaginoides Chrysanthemum nipponicum	
Coreopsis spp.	Coreopsis (Calliopsis): Early Sunrise, Moonbeam
Crocosmia spp.	Lucifer

continued...

Table 2. Tolerant Ornamental Species/Varieties - All States Except CA *(continued)* 

Scientific name	Common name
Delosperma spp.	Cooperi Pink
Delphinium spp.	Larkspur; Blue Elf
Dianthus deltoides	Dianthus, Maiden Pinks 'Zing'
Dianthus gratianopolitanus	Cheddar Pink
Echinacea purpurea	Coneflower, Purple; Magnus
Forsythia suspensa	Weeping Forsythia
Gaillardia spp.	Gaillardia, Blanket Flower 'Goblin'
Gaura spp.	
Gentiana dahurica	Gentian
Geranium cinereum	Cranesbill
Gypsophila repens	Baby's Breath
Helianthemum spp.	Sunrose
Hemerocallis spp.	Daylily: Aztec Gold, Stella De Oro, Tender Love
Heucherella spp.	Coral Bell; Bridget Bloom
Hibiscus spp.	Mallow; Disco Belle White
Hosta plantaginea	Hosta, Plantain Lily (Fragrant)
Hosta sieboldiana	Hosta, 'Searsucker'
Houttuynia cordata	
var. variegata	
Hydrangea macrophylla	Bigleaf Hydrangea
Inula ensifolia	
Iris ensata	Sword-Leaved Iris; Jodlesong
Iris siberica	Siberian Iris; Cabernet
Juniperus davurica	Parsoni
Lagerstromia indica x fauriei	Crape Myrtle; Tuscarora
Lantana montevidensis	Weeping Lantana
Lavender spp.	Lavender; Munstead
Leontopodium alpinum	Edelweiss
Ligustrum sinense	Chinese Privet; Variegata
Lilium spp.	Lily: Jazz
Liriope muscari var. variegata	Liriope, Variegated
Liriope spicata	Liriope, Creeping
Lobelia cardinalis	Cardinal Flower, Indian Pink
Loropetalum chinense	Burgundy
Lythrum spp.	Loosestrife; Modern Pink
Miscanthus sinensis	Yaku Jima**, Silberfeder**
Oenothera missourensis	Evening Primrose
Osmanthus heterophyllus	Osmanthus (False Holly):
D	Gulf Tide
Paeonia suffruticosa	Tree Peony
Pennisetum setaceum	Fountain Grass (Dwarf)**
Perovskia atriplicifolia	December 4 Feb. 37 11
Physostegia virginiana	Dragonhead, False; Vivid
Quercus shumardii	Oak, Shumard's Red
Raphiolepsis umbellata	Yedda Hawthorne

Scientific name	Common name
Rhododendron	'Delaware Valley White'
(including Azalea)	'Flame Creeper'
,	'Girard Crimson'
	'George L. Tabor'
	'Wakeiebisu'
	'White Gumpo'
Rudbeckia spp.	Black-Eyed Susan: Goldstrum
Saxifraga spp.	Saxifrage; Purple Dome
Scabiosa spp.	Pincushion Flower
Sedum cauticola	Stonecrop; Lidakense
Sedum dasyphyllum	Stonecrop
Sedum spurium	Stonecrop; Dragon's Blood
Spiraea bumalda	Spirea: Anthony Waterer
Syzygium paniculatum	Australian Brushcherry
Teucrium spp.	Germander
Thalictrum dipterocarpum	Meadow Rue
Veronica spp.	Veronica, Speedwell; Sunny Border
Viburnum suspensum	Arrowood Viburnum

<sup>\*\*</sup>Not for use on container grown plants.

#### **NEW PLANTINGS, REPLANTING AND ROTATIONAL PLANTINGS**

Nursery, landscape, or non-cropped land areas treated with Barricade 4FL should be rotated only to ornamental species listed on this label for 1 year following application unless the following test has shown species safety:

Before planting a species not listed on this label, it is recommended that several test strips of an indicator plant such as wheat, sorghum or corn be sown into the treated area. If the indicator plants germinate and grow normally to a height of 12 inches with normal root development, it is safe to plant.

In areas disturbed by new plantings or replanting of labeled species, it may be necessary to retreat exposed soil to maintain satisfactory weed control, but do not apply more than 48 ozs./A per year.

## STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

For minor spills, leaks, or other accidental contamination, follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during clean up and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

## **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**

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of container in a sanitary landfill, or incinerate, or burn if allowed by state and local authorities. Stay out of smoke from burning container.

### Chemigation

Do not apply this product through any type of irrigation system unless instructed otherwise in this label.

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Product of the United Kingdom Formulated in the USA

Manufactured for: Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, North Carolina 27419-8300 www.syngenta-us.com

SCP 1139A-L14 1207 246660



For selective preemergence control of grass and broadleaf weeds in:

- grass and broadlead weeds in:
  established turfgrasses (excluding golf course
  putting greens), lawns, and sod nurseries
  container, field-grown, and landscape ornamentals
  hardwood seedling nurseries
  established perennial and wildflower plantings
  Christmas tree farms

Active Ingredient:

. 40.7% Prodiamine\* 59.3% Other Ingredients: Total:

\*CAS No. 29091-21-2 Barricade 4FL contains 4 pounds active ingredient per gallon.

See additional precautionary statements and directions for use inside booklet.

AGRICULTURAL USE REQUIREMENTS Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions For Use section for information about this standard.

#### NON-AGRICULTURAL USE REQUIREMENTS

USE REQUIREMENTS
The requirements of this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40CFR part 170). The "WPS" applies when this product is used to produce agricultural plants uns product is used up produce adjusturated plants on drams, fused to museries. Applicators and han-dlers should wear long-sleened shirt, long pants, themical resistant gloves, shoes with socks and pro-tective eyewest. Thoroughly wesh face and hands with soop and water after exposure and before eat-ing or smolding. Lumdre exposed doffining before reuse. Do not allow reentry to treated areas until distance studies and the buff areas could be affected as dust has settled and the turf grass or soil is dry.

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Manufactured for: Syngenta Crop Protection, Inc. P.O. Box 18300 ensboro, North Carolina 27419-8300 w.syngenta-us.com

SCP 1139A-L14 1207 246660

## 10 gallons

**Net Contents** 

#### KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

CAUTION

May be harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### FIRST AID

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious or convulsing person.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poi-

after the first 5 minutes, then continue mising eye. Call a poson control center or doctor for treatment advice. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, refereably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice. If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Have the product container or label with your whore calling a

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24 Hour Medical Emergency
Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident) Call 1-800-888-8372. Environmental Hazards: This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Do not contaminate water when disposing of equipment wash water.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Pesticide Storage: For minor spills, leaks, or other accidental contamination, follow all precautions indicated on this label contamination, rollow an precalutions indicated on this land and clean up immediately. Take special care to avoid contam-ination of equipment and facilities during clean up and dis-posal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night. Pesticide Disposal: Wastes resulting from the use of this product.

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Chemigation: Do not apply this product through any type of irrigation system unless instructed otherwise in this label.

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