# 100-1139



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

12/07/2011

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Mr. Fred Pearson Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

DEC - 7 2011

Subject:

Label Amendment Product Name: Barricade 4FL EPA Reg. No.: 100-1139 Application dated: September 9, 2011

Dear Mr. Pearson:

The proposed label amendment of the product referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable.

Please note that marketing claims made on the pesticide label must be substantiated by data maintained in your files. If data supporting marketing claims made on the product label is not available, then those claims must be removed.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

<u>Products shipped after 18 months from the date on this notice or the next printing of the</u> <u>label whichever occurs first, must bear the new revised label</u>. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of this product constitutes acceptance of these conditions. This label supersedes all previously accepted labels. You must submit one copy of the final printed label <u>before the product is released for shipment.</u> One copy of the label stamped "Accepted" is enclosed for your records. If you have any questions, please contact Tracy White by phone at (703) 308-0042 or via email at <u>white.tracy@epa.gov</u>.

Sincerely, Albrym V. Mos

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Kathryn V. Montague Product Manager 23 Herbicide Branch Registration Division (7505P)

Enclosure-Stamped Label

| ACCEPTED   |
|--|
| DEC 7 2011   |
| Under the Federal Insecticide,<br>Fundicide, and Rodenticide Act,<br>as anothed, for the pesticide<br>registered under<br>mpA Reg. No 100-1139 |

[Booklet]

**Barricade® 4FL** 

Herbicide

For selective preemergence control of grass and broadleaf weeds in:

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

Active Ingredient:

| Prodiamine*        |        |
|--------------------|--------|
| Other Ingredients: | 59.3%  |
| Total:             | 100.0% |

\*CAS No. 29091-21-2

Barricade 4FL contains 4 pounds active ingredient per gallon.

# KEEP OUT OF REACH OF CHILDREN

# CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1139

EPA Est.

1 gallon 10 gallons 30 gallons 110 gallons \_\_\_\_\_ gallons Net Contents

|                      | FIRST AID   |
|----------------------|---|
| If swallowed         | <ul> <li>Call a poison control center or doctor immediately for treatment<br/>advice.</li> </ul>          |
|                      | <ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>                                  |
|                      | <ul> <li>Do not induce vomiting unless told to do so by a poison control<br/>center or doctor.</li> </ul> |
|                      | <ul> <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<br/>minutes.</li> </ul>           |
|                      | • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.                |
|                      | Call a poison 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, preferably mouth-to-mouth, if possible.   |
|                      | Call a poison control center or doctor for treatment advice.  |
| If on skin or        | Take off contaminated clothing.   |
| 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 you when calling a poison control center or                                       |
| doctor, or going for | or treatment.   |
|                      | HOT LINE NUMBER   |
| For 24               | Hour Medical Emergency Assistance (Human or Animal) or  |
| Chen                 | nical Emergency Assistance (Spill, Leak, Fire, or Accident)   |
|                      | Call  |
|                      | 1-800-888-8372  |

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# 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.

# **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 exist, 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 or rinsate.

### 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.

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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, LLC 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

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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:

- Coveralis
- 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.

#### USE 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
- 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 AND RESTRICTIONS**

- 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.

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- 1. Fill the spray tank 1/4 full with clean water only.
- 2. Start agitation and check to ensure it is working properly.
- 3. 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.)

| · · · · · · · · · · · · · · · · · · · | 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             |

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

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.
- 2. 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

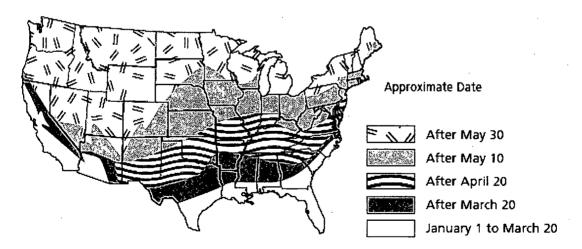
Barricade 4FL is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turfgrasses including:

- 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**



# Use Precautions and Restrictions - 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.

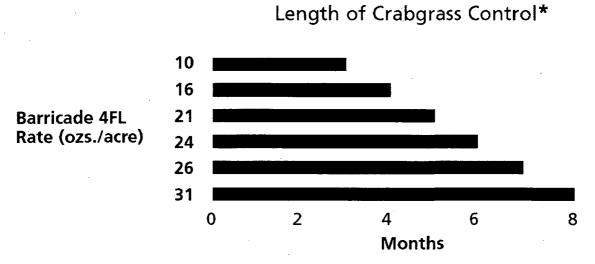
#### Application Timing And Rate - Turfgrass

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.)



# \*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. **Restriction**: 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>   | 21-48 <sup>1</sup> | 0.5-1.1                   |  |
| Bahiagrass  |                    |                           |  |
| Centipedegrass  |                    |                           |  |
| Kikuyugrass   |                    |                           |  |
| Seashore Paspalum   |                    |                           |  |
| St. Augustinegrass <sup>3</sup>   |                    |                           |  |
| Tall Fescue (including turf-type)                                       |                    |                           |  |
| Zoysiagrass   |                    |                           |  |
| Buffalograss  | 10-30 <sup>1</sup> | 0.23-0.70                 |  |
| Kentucky Bluegrass  |                    |                           |  |
| Perennial Ryegrass  |                    |                           |  |
| 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>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.

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Barricade 4FL,

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

<sup>4</sup>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*)<sup>1</sup> 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 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>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** 

<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.

<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 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.

# 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: See exceptions for *Poa annua* Control in Established Bermudagrass Overseeded with Perennial Ryegrass below.

| Amount of Barricade 4FL | Interval (Months Before Overs |            | verseeding)* |
|-------------------------|-------------------------------|------------|--------------|
| 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 (Arizona, California, Nevada and Texas 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.)

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How Much Barricade 4FL and When to Apply

| Amount to    |  | Expected   | Use Precautions and  |
|--------------|--|--|--|
| Apply        | When to Apply  | Control  | Restrictions   |
| 12-21 ozs./A | 6-8 weeks<br>before ryegrass<br>overseeding<br>second  | 1 application for<br>70% or greater<br>control of <i>Poa</i><br><i>annua</i> | <ol> <li>Some seedling mortality<br/>and temporary reduction in<br/>root growth of new<br/>seedlings may occur.</li> </ol>   |
|              | second<br>application: 4-8<br>weeks after<br>overseeding or<br>when perennial<br>ryegrass roots<br>are in the second<br>inch of soil | second<br>application may<br>enhance control                                 | <ol> <li>To reduce the potential for<br/>seedling mortality maintain<br/>a moist seedbed with light,<br/>frequent irrigation.</li> <li>Make no more than 2<br/>applications per year for<br/>this use, and do not<br/>exceed a total of 27 ozs./A<br/>per year.</li> <li>Do not make a second<br/>application if any injury to<br/>the ryegrass is observed<br/>after the first application.</li> <li>Do not make a second<br/>application.</li> </ol> |
|              |  |  | application unless the<br>product was first applied<br>before overseeding.   |

# Control of *Poa Annua* in Perennial Ryegrass Overseedings (Alabama, Louisiana, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee Only)

Use on golf courses (excluding golf course putting greens) when overseeding with perennial rye grass only (minimum seeding rate of 350 lbs./A.)

# How Much Barricade 4FL and When to Apply

| Amount to    |   | Expected       |  |
|--------------|---|----------------|--|
| Apply        | When to Apply                                       | Control        | Use Precautions  |
| 12-21 ozs./A | 8-10 weeks<br><b>before</b> ryegrass<br>overseeding | 70% or greater | Some seedling mortality and<br>temporary reduction in root<br>growth of new seedlings may<br>occur.<br>To reduce the potential for<br>seedling mortality maintain a<br>moist seedbed with light,<br>frequent irrigation.<br>To maximize seedling<br>establishment, use lower rate<br>and/or the maximum time<br>interval before overseeding. To<br>maximize <i>Poa annua</i> control,<br>use higher rate and shorter |
|              |   |                | interval before overseedir<br>maximize <i>Poa annua</i> con  |

# 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<br>Container or Field<br>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<br/>budding/grafting or after buds/grafts have taken.</li> </ol> |
| Established Container,<br>Field Nursery Stock, or<br>Landscape Plants | <ol> <li>Apply at any time as a broadcast, over-the-top, or<br/>directed spray.</li> </ol>  |
| Landscape (or<br>Ornamental) Plantings                                | <ol> <li>Apply as a broadcast, over-the-top, or as a directed<br/>spray.</li> <li>Delay applications to newly transplanted ornamentals<br/>until soil has settled around transplants.</li> </ol>  |
| Bare Ground Application<br>for Container Placement                    | <ol> <li>Apply to soil (including mulch, gravel, wood chips, or<br/>other permeable base) upon which containerized<br/>ornamentals are placed.</li> <li>After Barricade 4FL is applied, perform shallow<br/>cultivation or hand weeding only, to avoid disturbing the<br/>herbicide barrier.</li> </ol>                       |
| In Shadehouses and<br>Uncovered Polyhouses                            | <ol> <li>After Barricade 4FL is applied, uncovered polyhouses<br/>must remain open for at least 7 days and ornamentals<br/>must receive 2 irrigations totaling at least ½ inch of water<br/>before covering.</li> </ol>   |

| Site  | Application Instructions   |  |
|---|--|--|
| Ornamental Bulbs and<br>Perennial Wildflower<br>Plantings | <ol> <li>Barricade 4FL may be applied to bulbs or perennial<br/>wildflower species listed in the section. Apply before or<br/>after bulbs emerge but before bulbs bloom and weeds<br/>emerge.</li> </ol> |  |
|   | <ol> <li>In wildflowers, a postemergence herbicide labeled for<br/>wildflowers may be needed to control weeds that have<br/>already emerged.</li> </ol>  |  |

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

| Amount to Apply<br>(Broadcast)* | When to Apply                               | Comments/Instructions  |
|---------------------------------|---|--|
| 21–48 ozs./A                    | In fall or spring before weeds germinate or | <ol> <li>Use the higher rate for longer<br/>control.</li> </ol>                  |
| or                              | after weeds are<br>removed.                 | 2. Barricade 4FL may be applied more than once per year as long                  |
| 0.5–1.1 ozs./1,000 sq. ft.      |   | as the total amount of product<br>applied does not exceed 48<br>ozs./A per year. |

**\*NOTE:** For band application, calculate amount per acre:

<u>Band width in inches</u> x broadcast rate = amount to apply/acre of field Row width in inches

# Equivalent Measurements for Barricade 4FL

| ozs./A | ozs./1,000 sq. ft | Approximate Equivalent –<br>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 Container, Field Grown and Landscape 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)  | <ol> <li>Mix with Barricade 4FL for postemergence control of<br/>certain broadleaf weeds including malva and filaree.</li> </ol>  |
| Gallery®, Princep®, Pennant<br>Magnum®  | See product labels for weed spectrum and tolerant ornamentals.  |
| Touchdown Pro®,<br>Roundup® or other<br>glyphosate-based products,<br>Finale® | <ol> <li>These nonselective tank-mix herbicides control many<br/>emerged annual broadleaves and grasses.</li> <li>Take extreme care to prevent tank mixtures with<br/>these partner products from contacting the foliage<br/>and stems of turfgrass, trees, shrubs, or other<br/>desirable vegetation because desirable vegetation<br/>may be severely injured or killed. Apply these tank<br/>mixtures as a directed spray and use a shield to<br/>prevent spray from contacting foliage of desirable<br/>plants.</li> <li>Following instructions on the tank-mix partner's label,<br/>delay irrigation of the treated area to allow time for<br/>the herbicide to be absorbed by weed foliage.</li> </ol> |

#### **Tolerant Ornamental Species**

Barricade 4FL will not harm most trees, shrubs, vines and flowers. 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.

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# Table 1. Tolerant Ornamental Species - All States

| Scientific name           | Common name                                 |
|---------------------------|---|
| Abies spp.                | Fir species** (Balsam, Fraser, Noble, etc.) |
| Acer palmatum             | Japanese Maple                              |
| Acer platanoides          | Norway Maple***                             |
| Acer saccharum            | Sugar maple**                               |
| Achillea spp.             | Yarrow: King Edward                         |
| Actinidia chinensis       | Kiwi*                                       |
| Agapanthus africanus      | Lily-of-the-Nile (African Lily)             |
| Agastache rupestris       | Sunset Hyssop                               |
| Aquilegia spp.            | Aquilegia: Red and Gold                     |
| Arctostaphylos densiflora | Vine Hill Manzanita                         |
| Arctotheca calendula      | Cape Weed                                   |
| Aristida stricta          | Wiregrass                                   |
| Artemisia spp.            | Wormwood; Silver Mound, Castle              |
| Aspidistra elatior        | Cast-iron plant                             |
| Aucuba japonica           | Japanese Aucuba                             |
| Begonia spp.              | Fibrous Begonia: Hardy Grandis              |
| Berberis gladwynensis     | Barberry                                    |
| Berberis julianae         | Wintergreen Barberry                        |
| Berberis mentorensis      | Mentor Barberry                             |
| Berberis thunbergii       | Japanese Barberry                           |
| Berberis verruculosa      | Warty Barberry                              |
| Brassica oleracea         | Wild Cabbage                                |
| Buddleia spp.             | Butterfly-Bush, Dwarf Blue; Royal Red       |
| Buxus microphylla         | Japanese Boxwood                            |
| Callistemon viminalis     | Weeping Bottlebrush                         |
| Calluna vulgaris          | Scotch Heather                              |
| Carpobrotus edulis        | Hottentot Fig (Ice Plant)                   |
| Cassia artemisioides      | Feathery Cassia                             |
| Ceanothus rigidus         | Wild Lilac                                  |
| Centaurea gymnocarpa      | Dusty Miller                                |
| Chamaecyparis pisifera    | False Cypress                               |
| Cleyera japonica          | Cleyera                                     |
| Citrus spp.               | Citrus species*                             |
| Cornus alernifolia        | Pogoda Dogwood                              |
| Cornus florida            | Flowering Dogwood                           |
| Cornus stolonifera        | American Dogwood                            |
| Cortaderia selloana       | Pampas Grass                                |
| Cotoneaster apiculatus    | Cranberry Cotoneaster                       |
| Cotoneaster buxifolius    | Cotoneaster                                 |
| Cotoneaster dammeri       | Bearberry Cotoneaster                       |
| Cotoneaster glacophylla   | Gray-leaf Cotoneaster                       |
| Cotoneaster microphyllus  | Rockspray Cotoneaster                       |
| Soloneastor microphynus   | Hawthorne                                   |

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| Scientific name         | Common name                                     |
|-------------------------|---|
| Cupressus sempervirens  | Italian Cypress                                 |
| Delosperma alba         | White Trailing Ice Plant                        |
| Dendranthemum spp.      | Chrysanthemum                                   |
| Diascia intergerrima    | Twinspur  |
| <i>Digitalis</i> spp.   | Foxglove  |
| Dodonea viscosa         | Hop Bush  |
| Elaeagnus pungens       | Silverberry                                     |
| Euonymus fortunei       | Wintercreeper                                   |
| Euonymus japonica       | Japanese Spindle Tree (Evergreen Euonymus)      |
| Euonymus kiautschovicka | Spreading Euonymus                              |
| Euonymus macrophylla    | Euonymus  |
| Fatsia japonica         | Japanese Aralia                                 |
| Forsythia intermedia    | Border Forsythia                                |
| Forsythia viridissima   | Greenstem Forsythia                             |
| Gardenia jasminoides    | Gardenia, Cape-Jasmine                          |
| Gladiolus spp.          | Gladiolus species**                             |
| Gypsophila spp.         | Baby's Breath                                   |
| Hedera helix            | English Ivy                                     |
| Hemerocallis spp.       | Daylily: Aztec Gold, Stella De Oro, Tender Love |
| Hibiscus                | Rose of Sharon**                                |
| Hibiscus Rosa-sinensis  | Chinese Hibiscus**                              |
| <i>Hosta</i> spp.       | Hosta, Plantain Lily (Fragrant)                 |
| llex cornuta            | Chinese Holly**                                 |
| llex crenata            | Japanese Holly                                  |
| llex opaca              | American Holly                                  |
| llex pernyi             | Holly   |
| llex vomitoria          | Yaupon Holly                                    |
| Iris spp.               | Iris species**                                  |
| Jasminium nudiflorum    | Winter Jasmine                                  |
| Juniperus chinensis     | Chinese Juniper                                 |
| Juniperus conferta      | Shore Juniper                                   |
| Juniperus horizontalis  | Creeping Juniper                                |
| Juglans spp.            | Walnut*   |
| Justicia brandegeana    | Shrimp Plant                                    |
| Lagerstromia indica     | Crape Myrtle                                    |
| Lantana spp.            | Lantana   |
| Leucanthemum maximum    | Shasta Daisy                                    |
| Ligustrum amurense      | Amur Privet                                     |
| Ligustrum japonicum     | Japanese Privet                                 |
| Ligustrum lucidum       | Glossy Privet (Wax-Leaf)                        |
| Lilium spp.             | Lily: Jazz                                      |
| Liriope muscari         | Big Blue Lillyturf                              |
| Liriope spicata         | Liriope, Creeping                               |
| Lobelia erinus          | Lobelia   |
| Lonicera japonica       | Japanese Honeysuckle                            |
| comora japomoa          |   |

| Tatarian Honeysuckle<br>Magnolia species**<br>Ice Plant |
|---|
|   |
| lee Diant   |
|   |
| Crabapple*  |
| Heavenly Bamboo   |
| Narcissus species**                                     |
| Oleander  |
| Narrow-leaf primrose                                    |
| Pale Evening Primrose                                   |
| Olive*  |
| Mondo Grass**   |
| Origanum*   |
| Trailing African Daisy                                  |
| Sourwood  |
| Russian Sage  |
| Avocado*  |
| Frasier's Photinia (Redtip)                             |
| Spruce species*** (Colorado Blue, Norway, etc.)         |
| Andromeda   |
| 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<br>Prune*   |
| Douglas Fir***  |
| Firethorn Scarlet                                       |
| Firethorn   |
| Firethorn   |
| Bradford Pear spp.                                      |
| Northern Red Oak  |
|   |

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| Scientific name             | Common name            |  |
|-----------------------------|------------------------|--|
| Quercus rubra               | Oak species            |  |
| Raphiolepsis indica         | Indian Hawthorne       |  |
| Rhamnus smithii             | Buckthorn              |  |
| Rhododendron                | 'Coral Bells'          |  |
| (including Azalea)          | 'Formosa'              |  |
|                             | 'Hino-crimson'         |  |
|                             | 'PJM'                  |  |
|                             | 'Roseum Elegans'       |  |
| Rosa banksiae               | Lady Bank's Rose       |  |
| Rosmarinus officinalis      | Rosemary*              |  |
| Rumohra adiantiformis       | Leatherleaf Fern       |  |
| Ruscus hypophyllum          | Butcher's Broom        |  |
| Salvia daghestanica         | Sage*                  |  |
| Santolina virens            | -                      |  |
| Sedum spp.                  | Stonecrop              |  |
| Spirea japonica             | Spirea                 |  |
| Syzygium paniculatum        | Japanese Boxcherry     |  |
| Tagetes spp.                | Marigold               |  |
| Trachelospermum jasminoides | Star Jasmine           |  |
| Taxus cuspidata             | Japanese Yew           |  |
| Taxus media                 | Yew                    |  |
| Thuja occidentalis          | American Arborvitae    |  |
| Trachelospermum asiatum     | Star Jasmine           |  |
| Tsuga canadensis            | Canada Hemlock         |  |
| <i>Tulipa</i> spp.          | Tulip species          |  |
| Viburnum japonicum          | Japanese Viburnum      |  |
| Viburnum lantana            | Wayfaring Tree         |  |
| 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       |  |
| Viola x wittrockiana        | Pansy                  |  |
| Vitis spp.                  | Grape*                 |  |
| Weigela florida             | Old Fashioned Weigela  |  |
| Yucca aloifolia             | Spanish Bayonet        |  |
| Yucca filamentosa           | Yucca, Adam's Needle   |  |
| Zauschneria californica     | California Fushia      |  |

\*Do not use on food producing trees, vines, or plants. \*\*Not for use on container grown plants. \*\*\*Use on landscape ornamentals only.

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

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| Scientific name                       | Common name                                     |
|---------------------------------------|---|
| Abelia grandiflora                    | Abelia: Sherwood                                |
| Agapanthus orientalis                 |   |
| Akebia quintata                       | Five-Leaf or Chocolate Vine                     |
| Allium cernuum                        | Lady's Leek, Nodding Onion                      |
| Anemone hybrida                       | Japanese Anemone                                |
| Aster spp.                            | Aster: Bonny Blue, Purple Dome                  |
| Aster X frikartii                     |   |
| Athyrium filix-femina                 | Lady Fern; Fern Lady                            |
| Bergenia cordifolia                   |   |
| Boltonia asteroides                   | Snowbank  |
| Bougainvillea spp.                    | Bougainvillea                                   |
| 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   |
| 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                                      |
| Helianthemum spp.                     | Sunrose   |
| Heucherella spp.                      | Coral Bell; Bridget Bloom                       |
| Hibiscus spp.                         | Mallow; Disco Belle White                       |
| Hosta sieboldiana                     | Hosta, 'Searsucker'                             |
| Houttuynia cordata var. variegata     |   |
| Hydrangea macrophylla                 | Bigleaf Hydrangea                               |
| nula ensifolia                        | Digical Hydrangea                               |
| ris ensata                            | Sword-Leaved Iris; Jodlesong                    |
| ris ensata<br>Iris siberica           | Siberian Iris; Cabernet                         |
|                                       |   |
| Juniperus davurica                    | Parsoni<br>Crano Murtle: Tuccarora              |
| Lagerstromia indica x fauriei         | Crape Myrtle; Tuscarora                         |
| Lantana montevidensis                 | Weeping Lantana                                 |
| Lavender spp.<br>Leontopodíum alpinum | Lavender; Munstead                              |
|                                       | Edelweiss                                       |

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| Scientific name                | Common name                        |
|--------------------------------|------------------------------------|
| Ligustrum sinense              | Chinese Privet; Variegata          |
| Liriope muscari var. variegata | Liriope, Variegated                |
| 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): Gulf Tide |
| Paeonia suffruticosa           | Tree Peony                         |
| Pennisetum setaceum            | Fountain Grass (Dwarf)**           |
| Physostegia virginiana         | Dragonhead, False; Vivid           |
| Quercus shumardii              | Oak, Shumard's Red                 |
| Raphiolepsis umbellata         | Yedda Hawthorne                    |
| 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                         |
| Viburnum suspensum             | Arrowood Viburnum                  |

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

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# 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 Handling [less than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of container in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### Container Handling [Bulk/Mini-bulk]

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least once complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### Chemigation

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

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Finale® trademark of Bayer AG

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Roundup® trademark of Monsanto Company

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

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 1139A

## **Barricade® 4FL**

#### Herbicide

For selective preemergence control of grass and broadleaf weeds in:

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

Active Ingredient:

| Prodiamine*        |        |
|--------------------|--------|
| Other Ingredients: | 59.3%  |
| Total:             | 100.0% |

\*CAS No. 29091-21-2

Barricade 4FL contains 4 pounds active ingredient per gallon.

EPA Reg. No. 100-1139 EPA Est.

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Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

SCP 1139A

1 gallon 10 gallons 30 gallons 110 gallons 264 gallons \_\_\_\_\_\_gallons Net Contents

# KEEP OUT OF REACH OF CHILDREN

# CAUTION

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

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 have settled and the turf grass or soil is dry.

#### 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 poison 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, preferably 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 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 or rinsate.

# [10, 30, 110 gallons and Bulk] 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 should 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, LLC or Seller. To the extent consistent with 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 consistent with applicable law, this warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA 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, in no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH 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 Limitations of Warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

# 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 Handling [less than 5 gallons]:** Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of container in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Container Handling [Bulk/Mini-bulk]:** Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least once complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

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