

## Herbicide

Active Ingredient:

Other Ingredients: 35.0%

Total:

100.0%

\*CAS No. 29091-21-2

For 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 perennials and wildflower plantings
- Christmas tree farms

# KEEP OUT OF REACH OF CHILDREN. **CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-834

EPA Est. No. 62171-MS-001

SCP 834A-M5 0504 277030

# 80 pounds

**Net Contents** 



₹)

	FIRST AID
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 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>
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 by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
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 the poison control center or doctor.  Do not give anything by mouth to an unconscious person.

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

Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

## Personal Protective Equipment (PPE)

#### WPS USES:

Applicators and other handlers (other than mixers and loaders) 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
- Chemical-resistant gloves such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils
- Shoes plus socks

#### Mixers and Loaders must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as butyl rubber >14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils
- Shoes plus socks

## PRECAUTIONARY STATEMENTS (continued)

#### NON-WPS USES:

Mixers and loaders who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) — in general, only agricultural-plant uses are covered by the WPS — must wear:

Waterproof gloves

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 Controls 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.

#### **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 wash the outside of gloves before removing them, then remove
  gloves and all other PPE. Immediately wash 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 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, Inc. or Seller. All such risks shall be assumed by Buyer and User, and 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. 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.

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. 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.

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 neoprene rubber >14 mils, or nitrile rubber >14 mils
- Shoes plus socks

## STORAGE AND DISPOSAL

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

#### **Pesticide Storage**

Store in original container away from fertilizer, feed, or food stuffs.

#### **Pesticide Disposal**

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **Container Disposal**

Paper bags and boxes: Completely empty container into application equipment. Then dispose of empty bag or box in a sanitary landfill or incinerate; or, if allowed by state and local authorities, burn locally. Stay out of smoke from burning container.

**Plastic jugs:** Triple rinse (or equivalent) and dispose of container in a sanitary landfill or incinerate, or if allowed by state and local authorities, burn locally. Stay out of smoke from burning container.

**Fiber drums with liners:** Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

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.

#### Chemigation

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

#### **GENERAL INFORMATION**

#### WHERE TO USE

Barricade 65WG is a preemergence herbicide that provides residual control of many grass and broadleaf weeds in:

- Established turf grasses (excluding golf course putting greens), lawns and sod nurseries
- Container, field grown and landscape ornamentals
- Established perennials and wildflower plantings
- Plants grown for cut foliage production (Florida only)
- Christmas tree farms

#### HOW BARRICADE 65WG WORKS

Barricade 65WG controls susceptible weeds by preventing growth and development of newly germinated weed seeds. Weed control is most effective when Barricade 65WG is activated by at least 0.5 inch of rainfall or irrigation or shallow incorporation (1 to 2 inches) before weed seeds germinate and within 14 days following application.

#### USE PRECAUTIONS

- Do not graze or feed livestock forage cut from areas treated with Barricade 65WG.
- Do not apply Barricade 65WG to plants that will be consumed for food use.
- Follow all applicable directions, restrictions, and precautions on the labels of EPA-registered tank mix partners.
- Do not blend Barricade 65WG onto dry fertilizer or any other granular material.
- Chemigation: Do not apply this product through any type of irrigation system unless instructed otherwise in this label.
- Do not apply aerially.
- Do not apply to golf course putting greens.

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

Nursery, landscape, or non-crop land areas treated with Barricade 65WG 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.

## MIXING AND APPLICATION PROCEDURES

#### MIXING

Barricade 65WG 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 or fluid fertilizer only.
- 2. Start agitation and check to ensure it is working properly.
- 3. Add Barricade 65WG directly into the tank.
- 4. Add the rest of the carrier to obtain the final spray volume.
- 5. A spray colorant may be used with Barricade 65WG to mark areas as they are treated. This will improve application accuracy by minimizing swath skips and overlaps.
- 6. Maintain vigorous agitation in the spray tank before and during the application. This will ensure a well-mixed spray suspension.
- 7. Do not allow spray suspension to dry in the tank. Thoroughly clean the sprayer after use by flushing the system with water containing a detergent. Refer to the **Pesticide Disposal** section of this label for waste disposal.

#### TANK MIXING BARRICADE 65WG

Barricade 65WG 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 consult 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 65WG in a tank mixture with other pesticides, observe the most restrictive label limitations and precautions on the labels of the products used.

Before tank mixing with other pesticides not named on this label compatibility must be tested. See the Compatibility Test section.

#### COMPATIBILITY TEST

Before mixing Barricade 65WG with other pesticides in the spray tank, test the compatibility by mixing all components (carrier and pesticide products) in a small container in proportionate quantities. For example, a 1-quart jar would be 1/100 the volume of a 25 gal./A spray rate. At 1 lb./A the Barricade 65WG rate would be proportional to 4.5 g per quart. Add approximately 1.5 teaspoons to a quart of water. Calculate amounts for other products based on rate per acre. An approximate volume would be 1.5 teaspoons for each pound per acre of a dry formulation and 0.5 teaspoons for each pint per acre of a liquid formulation (see following table).

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

Component	Rate Per		Level
Formulations	Acre	1,000 Sq. Ft.	Teaspoons
Barricade 65WG	1.0 lb.	0.4 oz.	1 <sup>1</sup> /2
Dry Tank Mix Partners	1.0 lb.	0.4 oz.	1 <sup>1</sup> /2
Liquid Tank Mix Partners	1.0 pt.	0.4 oz.	1/2

If components do not ball up or form flakes, sludge, gels, oily films or layers; then the mixture is compatible. Incompatibility will usually occur within 5 minutes after mixing. If the components are not compatible, a compatibility agent must be added to the tank mixture. Rerun the test to determine if the mixture is suitable after addition of the compatibility agent. If components are still not compatible, do not tank mix.

#### MIXING ORDER FOR TANK MIXTURES

**Notes:** (1) When mixing Barricade 65WG with other components (carrier and partner pesticide products), allow products to completely dissolve between steps. This is key when tank mixing with ester formulations. (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 product to disperse before adding any other tank mix partner.
- 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 flowable liquids (FL) or suspension concentrates (SC).
- 5. Add emulsifiable concentrates (EC) last.

#### APPLICATION

Apply Barricade 65WG in a minimum of 20 gal./A (0.5 gal./1000 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 hand-held 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 65WG is a preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds listed on this label in established turfgrasses including:

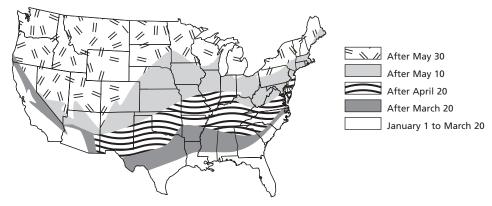
- Golf courses excluding putting greens
- Lawns
- Sod nurseries

The maximum amount of Barricade 65WG that may be applied per year is given for each turfgrass species in the **Annual Use Rates - Turfgrass** section of this label.

For optimum weed control, Barricade 65WG 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

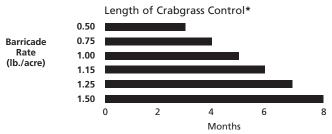
- Do not apply Barricade 65WG to areas where dichondra, colonial bentgrass, velvet bentgrass, or annual bluegrass (Poa annua) are desirable species.
- Do not cut (harvest) treated sod before 90 days after application. To avoid turfgrass injury, do not apply to newly set sod until the sod has rooted and exposed edges have filled in.
- To avoid turfgrass injury, do not apply Barricade 65WG to turf stressed by conditions such as drought, low fertility, or pest damage.
- Disturbing the herbicide barrier with cultural practices such as disking may result in reduced weed control.
- Do not apply Barricade 65WG to golf course putting greens.
- If the depth of the creeping bentgrass root system becomes shallow and root tips contact Barricade-treated soil, new root formation may be inhibited. Mowing height can affect the depth of a plant's root system. To avoid this, do not apply Barricade 65WG to creeping bentgrass less than 0.5 inch in height.

#### Application Timing and Rate - Turfgrass

Barricade 65WG may be applied as a single application or in sequential applications to control weeds germinating throughout the year. All applications should be made before target weeds germinate. Barricade 65WG will not control weeds that have already emerged.

The amount of Barricade 65WG 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, and 3) the maximum amount which can be applied to the turf species per calendar year.

Figure 1: Length of Crabgrass Control



<sup>\*</sup>Length of control varies by region. This figure is an average for planning purposes.

#### Annual Use Rates - Turfgrass

Barricade 65WG can be applied to the turfgrass species listed in the following table. Do not apply more than the highest rate listed for each species in a calendar year.

Table 1: Maximum Application Rate of Barricade 65WG per Calendar Year for Turfgrass Species<sup>1</sup>

Turf Species	Lbs. product/A	Oz. product/ 1,000 sq. ft.	Area treated per water soluble packet (sq. ft.)
Bermudagrass <sup>2</sup> Bahiagrass Centipedegrass Kikuyugrass Seashore Paspalum St. Augustinegrass <sup>3</sup> Tall Fescue (including turf-type) Zoysiagrass	1.0-2.3 <sup>1</sup>	0.36-0.83	22,000-9,600
Buffalograss Kentucky Bluegrass Perennial Ryegrass	0.5-1.50 <sup>1</sup>	0.185-0.55	44,000-14,700
Fine Fescue	0.5-1.15 <sup>1</sup>	0.185-0.42	44,000-19,100
Creeping Bentgrass (0.5 inches or more in height) <sup>4</sup>	0.5-1.00 <sup>1</sup>	0.185-0.37	44,000-22,000

<sup>&</sup>lt;sup>1</sup>Barricade 65WG may be applied more than once a year as long as the total amount applied is not greater than the maximum application rate per calendar year for the turf species. All applications must be made before weed seeds germinate.

<sup>3</sup>Use an initial rate of 0.75-1.5 lbs./A (0.28-0.55 oz./1,000 sq. ft.) per application.

#### Weeds Controlled (Turf, Ornamentals)

When used as directed in this label Barricade 65WG 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>

Goosegrass<sup>5</sup> Henbit<sup>2</sup> Itcharass

Johnsongrass (from seed)

Junglerice Knotweed<sup>2</sup> Kochia

Lambsquarter, Common

Lovegrass

Panicum (Texas, Fall, Browntop)

Pigweed

Purslane, Common Pusley, Florida Rescuegrass<sup>4</sup> Shepherds Purse<sup>2</sup> Signalgrass, Broadleaf Speedwell, Persian

Sprangletop Spurge, Prostrate

Witchgrass

Woodsorrel, Yellow (from seed)

## When to Apply Barricade 65WG After Overseeding Turf

Injury to desirable seedlings is likely if Barricade 65WG 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 65WG.

<sup>&</sup>lt;sup>2</sup>May be used on newly-sprigged or plugged Bermudagrass at rates not to exceed 0.80 lb./A (0.30 oz./1,000 sq. ft.). Newly-sprigged or plugged Bermudagrass stolon rooting may be temporarily retarded.

<sup>&</sup>lt;sup>4</sup>To avoid grass injury, do not apply Barricade 65WG to creeping bentgrass mowed at less than 0.5 inch in height.

<sup>&</sup>lt;sup>1</sup>In areas where *Poa annua* is a winter annual, apply Barricade 65WG (see Table 1) 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>&</sup>lt;sup>2</sup>To control this weed, apply Barricade 65WG in late summer, fall, or winter before weed seeds germinate.

<sup>&</sup>lt;sup>3</sup> Fall Applications for Spring Crabgrass Control in Cool-Season Grasses: In those areas where the ground freezes in the winter, Barricade 65WG can be applied in the fall at rates of 1.0 to 1.15 lbs./A after the soil temperature falls below 50°F but before the ground freezes. This application will control crabgrass the following spring.

<sup>&</sup>lt;sup>4</sup>Suppression only.

<sup>&</sup>lt;sup>5</sup>In many areas a single application of 1.0-2.3 lbs./A Barricade 65WG will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, the most effective control may be maintained by making a "split application" (i.e., two applications) that does not exceed the maximum rate per calendar year for that turfgrass species.

### When to Overseed After Application - All States\*

Barricade 65WG 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 *Pro annua* Control in Established Bermudagrass Overseeded with Perennial Ryegrass below.

Amount of Barricade 65WG	Inte	rval (Months) Before Overse	eding
Lbs. Product/A	North	Transition	South
0.75	4	4	4
1.00	5	4	4
1.15	6	5	5
1.25	-	6	6
1.50	-	7	7
1.75	-	-	9
2.00	-	-	10
2.30	-	-	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 ryegrass (minimum seeding rate of 350 lbs./A).

## How Much and When to Apply

Amount to Apply	When to Apply	Expected Control	Use Precautions
0.58-1.0 lb./A	6-8 weeks before rye- grass overseeding  Second application: 4-8 weeks after over- seeding or when perennial ryegrass roots are in the second inch of soil	1 application for 70% or greater control of <i>Poa</i> <i>annua</i> Second application may enhance control	<ul> <li>Some seedling mortality and temporary reduction in root growth of new seedlings may occur.</li> <li>To reduce the potential for seedling mortality maintain a moist seedbed with light, frequent irrigation.</li> <li>Make no more than 2 applications per year for this use, and do not exceed a total of 1.3 lbs/A per year.</li> <li>Do not make a second application if any injury to the ryegrass is observed after the first application.</li> <li>Do not make a second application unless the product was first applied before overseeding.</li> </ul>

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

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

### How Much and When to Apply

Amount to Apply	When to Apply	Expected Control	Use Precautions
0.58-1.0 lb./A	8-10 weeks before ryegrass overseeding	70% or greater	Some seedling mortality and temporary reduction in root growth of new seedlings may occur. To reduce the potential for seedling mortality maintain a moist seedbed with light, frequent irrigation. To maximize seedling establishment, use lower rate and/or the maximum time interval before overseeding. To maximize Poa annua control, use higher rate and shorter time interval before overseeding.

## CONTAINER, FIELD GROWN AND LANDSCAPE ORNAMENTALS (INCLUDING CHRISTMAS TREE FARMS) Application Timing and Information

#### Barricade 65WG:

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

#### Use Precautions

## To reduce injury potential:

- In the spring when buds are rapidly growing and expanding, over-the-top application of Barricade 65WG may temporarily injure new growth of desirable plants. To reduce the possibility of injury at this time, wait to apply Barricade 65WG 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.
- After application (immediately for deciduous plants), apply overhead irrigation to wash Barricade 65WG from plant surfaces onto soil (watering plants before application may improve the washing process).

## **Application Sites and Instructions**

Site	Application Instructions
Newly-Transplanted Container or Field Nursery Stock	<ul> <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> </ul>
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	Apply as a broadcast, over-the-top, or as a directed spray.     Delay application to newly-transplanted ornamentals until soil has settled around transplants.
Bare Ground Application for Container Placement	Apply to soil (including mulch, gravel, wood chips, or other permeable base) upon which containerized ornamentals are placed.  After Barricade 65WG is applied, perform shallow cultivation or hand weeding only, to avoid disturbing the herbicide barrier.
In Shadehouses and Uncovered Polyhouses	After Barricade 65WG is applied, uncovered polyhouses must remain open for at least 7 days and ornamentals must receive 2 irrigations totaling at least 1/2 inch of water.
Ornamental Bulbs and Perennial Wildflower Plantings	Barricade 65WG may be applied to bulbs or perennial wildflower species listed in the section, Tolerant Ornamental Species. Apply before or after bulbs emerge but before bulbs bloom and weeds emerge. In wildflowers, a postemergence herbicide labeled for wildflowers may be needed to control weeds that have already emerged.

## How Much and When to Apply - Container, Field Grown and Landscape Ornamentals

Amount to Apply (Broadcast)*	When to Apply	Comments/Instructions	
1.0-2.3 lbs./A or 0.37-0.83 oz./ 1,000 sq. ft.	In fall or spring before weeds germinate or after weeds are removed	<ul> <li>Use the higher rate for longer control.</li> <li>Barricade 65WG may be applied more than once per year as long as the total amount of product applied does not exceed 2.3 lbs./A per year.</li> </ul>	

\*Note: For band application calculate amount per acre:

Band width in inches x broadcast rate = amount to apply per acre of field

Row width in inches

#### **Equivalent Measurements for Barricade 65WG**

Lbs./A	oz./1,000 sq. ft.	Approximate Equivalent – Tablespoons/1,000 sq. ft.
1.0	0.37	1
1.5	0.55	1.5
2.0	0.74	2
2.3	0.83	2.25

#### Tank Mixtures For Use On Container, Field Grown, and Landscape Ornamentals

Barricade 65WG 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 65WG are for use only in states where the tank mix partner(s), application site, and intended use pattern are registered.

Follow the label(s) of the tank mix partner(s) for application rates, timing, weeds controlled, tolerant ornamentals, and specific use precautions and/or restrictions. Before mixing pesticides in the spray tank, test compatibility by mixing the products in a small container first. See the **Compatibility Test** section of this label.

#### Tank Mix Partners for Barricade 65WG on Ornamentals

Product	Precautions/Instructions
Goal® (use on conifers only)	Mix with Barricade 65WG for postemergence control of certain broadleaf weeds including malva and filaree.
Gallery®, Princep®, Pennant®	See product labels for weed spectrum and tolerant ornamentals.
Touchdown Pro™ (or other glyphosate based products), Reward®, Finale®	These nonselective tank mix herbicides control most emerged annual broadleaves and grasses. Take extreme care to prevent tank mixtures with these 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. 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.

#### Tolerant Ornamental Species - Container, Field Grown, and Landscape Ornamentals

Barricade 65WG will not harm most trees, shrubs, vines, and flowers. The species listed below in Table 2 are tolerant to Barricade 65WG. Barricade 65WG is approved for application, except in California, to the species in Table 3. Barricade 65WG may be applied over-the-top of the listed species.

When plants are under stress (such as heat, drought, or frost damage) some cultivars of listed plants may be sensitive to Barricade 65WG.

## Table 2: Tolerant Ornamental Species - Container, Field Grown, and Lanscape Ornamentals - All States

Scientific name	Common name
Abies spp.	Fir species** (Balsam, Fraser, Noble, etc.)
Acer palmatum	Japanese Maple***
Acer platanoides	Norway Maple
Actinidia chinensis	Kiwi*
Agapanthus africanus	Lily-of-the-Nile (African Lily)
Arctostaphylos densiflora	Vine Hill Manzanita
Arctotheca calendula	Cape Weed
Aucuba japonica	Japanese Aucuba
Berberis gladwynensis	Barberry
Berberis julianae	Wintergreen Barberry
Berberis mentorensis	Mentor Barberry
Berberis thunbergii	Japanese Barberry
Berberis verruculosa	Warty Barberry
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
Chamaecyparis pisifera	False Cypress
Cleyera japonica	Cleyera
Citrus spp.	Citrus species*
Cornus florida	Flowering Dogwood
Cornus stolonifera	American Dogwood
Cortaderia selloana	Pampas Grass
Cotoneaster apiculatus	Cranberry Cotoneaster
Cotoneaster buxifolius	Cotoneaster
Cotoneaster dammeri	Bearberry Cotoneaster
Cotoneaster microphyllus	Rockspray Cotoneaster
Crataegus spp.	Hawthorne
Cupressus sempervirens	Italian Cypress
Delosperma alba	White Trailing Ice Plant
Dodonaea viscosa	Hop Bush
Elaeagnus pungens	Silverberry
Euonymus fortunei	Wintercreeper
Euonymus japonica	Japanese Spindle Tree (Evergreen Euonymus)

Scientific name Common name

Euonymus kiautschovicks Spreading Euonymus

 Fatsia japonica
 Japanese Aralia

 Forsythia intermedia
 Border Forsythia

 Forsythia viridissima
 Greenstem Forsythia

 Gardenia jasminoides
 Gardenia, Cape-Jasmine

Gladiolus species\*\*

Hedera helix English Ivy

Hibiscus Rosa-sinensis Rose of Sharon\*\*

Hibiscus Rosa-sinensis Chinese Hibiscus\*\*

Ilex cornutaChinese Holly\*\*Ilex crenataJapanese HollyIlex opacaAmerican Holly

Ilex pernyi Holly

Ilex vomitoriaYaupon HollyIris 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

 Ligustrum amurense
 Amur Privet

 Ligustrum japonicum
 Japanese Privet

Ligustrum lucidumGlossy Privet (Wax-Leaf)Lirope muscariBig Blue LillyturfLonicera japonicaJapanese Honeysuckle

Lonicera tatarica Tatarian Honeysuckle
Magnolia spp. Magnolia species\*\*

Malephora luteola Ice Plant
Malus spp. Crabapple\*

Nandina domestica Heavenly Bamboo
Narcissus spp. Narcissus species\*\*

Nerium spp. Oleander
Olea europaea Olive\*

Ophiopogon japonicus Mondo Grass\*\*

Osteospermum fruticosum Trailing African Daisy

Oxydendrum arboreum Sourwood

Table 2: Tolerant Ornamental Species - Container, Field Grown, and Lanscape Ornamentals - All States (continued)

Scientific name	Common name	
Persea americana	Avocado*	
Photinia fraseri	Frasier's Photinia (Redtip)	
Picea spp.	Spruce species*** (Colorado Blue, Norway, etc.)	
Pieris japonica	Lily-of-the-Valley Shrub	
Pinus brutia	Calabrian Pine	
Pinus canariensis	Canary Island Pine	
Pinus elliottii	Slash Pine	
Pinus halepensis	Aleppo Pine	
Pinus nigra	Austrian Black Pine	
Pinus palustris	Longleaf Pine	
Pinus radiata	Monterey Pine	
Pinus strobus	Eastern White Pine	
Pinus sylvestris	Scotch Pine	
Pinus taeda	Loblolly Pine	
Pinus thunbergiana	Japanese Black Pine	
Pinus virginiana	Virginia Pine	
Pistacia spp.	Pistachio*	
Pittosporum rhombifolium	Queensland Pittosporum	
Pittosporum tobira	Japanese Pittosporum	
Podocarpus macrophyllus	Japanese Yew	
Prunus laurocerasus English Laurel		
Prunus spp. Almond, Apricot, Nectarine, Peach, Plum, and		
Pseudotsuga menziesii	Douglas Fir***	
Pyracantha coccinea	Firethorn Scarlet	
Pyracantha fortuneana	Firethorn	
Pyracantha koidzumii	Firethorn	
Pyrus spp.	Bradford Pear spp.	
Quercus rubra	Oak species	
Rhaphiolepis indica	Indian Hawthorne	
Rhododendron (including Azalea)	'Coral Bells'	
	'Fomosa'	
	'Hino-crimson'	
	'PJM'	
	'Roseum Elegans'	
Rosa banksiae	Lady Bank's Rose	
Rosmarinus officinalis	Rosemary*	

Scientific name	Common name
Rumohra adiantiformis	Leatherleaf Fern
Santolina virens	
Sedum album	Stonecrop
Syzygium paniculatum	Japanese Boxcherry
Taxus cuspidata	Japanese Yew
Taxus media	Yew
Thuja occidentalis	American Arborvitae
Trachelospermum asiaticum	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 trilobum	Cranberry Bush
Viburnum wrightii	Leatherleaf Viburnum
Vinca major	Vinca
Vinca minor	Dwarf Periwinkle
Vitis spp.	Grape*
Weigela 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. \*\*\*Landscape ornamentals only.

## Table 3: Tolerant Ornamental Species/Varieties - All States Except CA

Scientific name	Common name	
Abelia grandiflora	Abelia: Sherwood	
Achillea spp.	Yarrow: King Edward	
Agapanthus orientalis		
Akebia quinata	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	

continued...

Table 3: Tolerant Ornamental Species/Varieties - All States Except CA (continued)

Scientific name Common name

Aster X frikartii

Athyrium filix-femina Lady Fern; Fern Lady

Begonia spp. Fibrous Begonia: Hardy Grandis

Bergenia cordifolia

Boltonia asteroides Snowbank
Bougainvillea 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

Cooperi Pink

Larkspur: Blue Elf

Crocosmia spp. Lucifer

Delosperma spp.
Delphinium spp.

Dianthus deltoides Dianthus, Maiden Pinks 'Zing'

Dianthus gratianopolitanus Cheddar Pink

Echinacea pupurea Coneflower, Purple; Magnus

Forsythia suspensa Weeping Forsythia

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 BloomHibiscus spp.Mallow; Disco Belle WhiteHosta plantagineaHosta, 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

	ntii		

Lagerstromia indica x fauriei

Lantana montevidensis

Lavender spp.

Leontopodium alpinum

Ligustrum sinense

Lilium spp.

Lirope muscari var. variegata

Lirope spicata

Lobelia cardinalis

Loropetalum chinense

Lythrum spp.

Miscanthus sinensis

Oenothera missourensis Osmanthus heterophyllus

Paeonia suffruticosa Pennisetum setaceum Perovskia atriplicifolia

Physostegia virginiana Quercus shumardii Rhaphiolepis umbellata

Rhododendron (including azalea)

Rudbeckia spp.
Saxifraga spp.

Scabiosa spp. Sedum cauticola

Sedum dasyphyllum Sedum spurium

Spiraea bumalda Syzyglum paniculatum

Teucrium spp.

Thalictrum dipterocarpum

Veronica spp.

Viburnum suspensum

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

#### Common name

Crape Myrtle; Tuscarora

Weeping Lantana Lavender: Munstead

Edelweiss

Chinese Privet; Variegata

Lily: Jazz

Lirope, Variegated Lirope, Creeping

Cardinal Flower, Indian Pink

Burgundy

Loosestrife; Modern Pink Yaku Jima\*\*, Silberfeder\*\*

**Evening Primrose** 

Osmanthus (False Holly): Gulf Tide

Tree Peony

Fountain Grass (Dwarf)\*\*

Dragonhead, False; Vivid

Oak, Shumard's Red

Yedda Hawthorne

'Delaware Valley White'

'Flame Creeper'

'Girard Crimson'

'George L. Tabor'

Wakeiebisu

White Gumpo

Black-Eyed Susan: Goldstrum

Saxifrage; Purple Dome Pincushion Flower

Stonecrop; Lidakense

Stonecrop

Stonecrop; Dragon's Blood Spirea: Anthony Waterer

Australian Brushcherry

Germander Meadow Rue

Veronica, Speedwell; Sunny Border

Arrowood Viburnum

Barricade®, Pennant®, Princep®, Touchdown®, the Syngenta logo and the CP FRAME are trademarks of a Syngenta Group Company
Finale® trademark of Bayer AG
Gallery® trademark of Dow AgroSciences
Goal® trademark of Dow Agrosciences LLC
Roundun® trademark of Monsanto Company

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

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

SCP 834A-M5 0504 277030

©2008 Syngenta



## Herbicide

Active Ingredient:

Other Ingredients: 35.0% 100.0% Total:

\*CAS No. 29091-21-2

For 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 perennials and wildflower plantings
- · Christmas tree farms

See directions for use in attached 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

EPA Reg. No. 100-834 EPA Est. No. 62171-MS-001

Barricade® and the Syngenta logo are trademarks of a Syngenta Group Company

©2008 Syngenta

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

SCP 834A-M5 0504 277030

#### PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# 80 pounds

**Net Contents** 

## KEEP OUT OF REACH OF CHILDREN.

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 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 treat-

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment

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 the poison control center or doctor. Do not give anything by mouth to an uncon-

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

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.

#### 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

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, Inc. or Seller. All such risks shall be assumed by Buyer and User, and 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. 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.

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. THE EXCLU-SIVE 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) RESULT-ING 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

## Storage and Disposal

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

Pesticide Storage: Store in original container away from fertilizer, feed, or food stuffs.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### Container Disposal

Paper bags and boxes: Completely empty container into application equipment. Then dispose of empty bag or box in a sanitary landfill or incinerate; or, if allowed by state and local authorities, burn locally. Stay out of smoke from burning container.

Plastic Jugs: Triple rinse (or equivalent) and dispose of container in a sanitary landfill or incinerate, or if allowed by state and local authorities, burn locally. Stay out of smoke from burning container.

Fiber drums with liners: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

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

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

