



United States
Environmental Protection Agency
 Washington, DC 20460

Registration
 Amendment
 Other

OPP Identifier Number
 NOTIFICATION

Application for Pesticide - Section I

1. Company/Product Number 100-834	2. EPA Product Manager Joanne Miller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Barricade® 65WG Herbicide	PM# 23	
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____
<input type="checkbox"/> Check if this is a new address		

Section - II

Amendment - Explain below. Final printed labels in response to Agency letter dated _____
 Resubmission in response to Agency letter dated _____ "Me Too" Application.
 Notification - Explain below. Other - Explain below.

NOTIFICATION
JUL 27 2001

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA. The following changes are being made via this notification: 1) Company name and address have been updated to reflect Syngenta Crop Protection, Inc. 2) The Conditions of Sale and Warranty statement has been changed to reflect the name change. Because Syngenta has been formed by the merger of Novartis Crop Protection, Inc. and Zeneca Ag Products, we have chosen to use the former Zeneca warranty statement as the Syngenta warranty statement. No other changes occur in the statement other than the name change. 3) The copyright date reflects Syngenta. 4) Trademark statements have been updated to reflect Syngenta for those products for which Syngenta holds the trademark. 5) The Internet address has been changed to reflect Syngenta. 6) Other places in the label which referring to the company name have been updated.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
*Certification must be submitted		If "Yes" Unit Packaging wgt. No. per Container	If "Yes" Unit Packaging wgt. No. per container		
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application)		
Name Nan S. Padgett	Title Label Group Leader	Telephone No. (Include Area Code) 336-632-7567
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Label Group Leader	
4. Typed Name Nan S. Padgett	5. Date July 13, 2001	

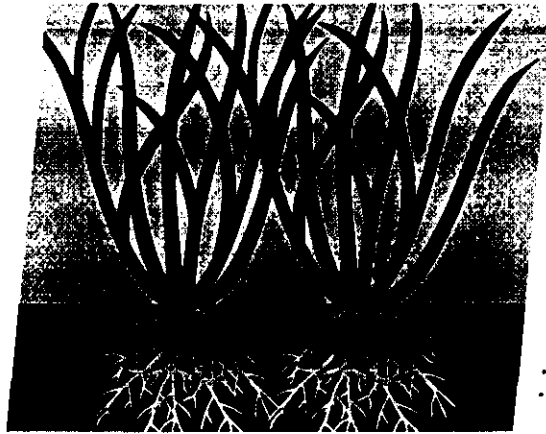
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NOTIFICATION

JUL 27 2001

PULL HERE TO OPEN ►

Barricade®



65WG

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 perennials and wildflower plantings
- Christmas tree farms
- plants grown for cut foliage production (Florida only)

Active Ingredient:	
Prodiamine (CAS No. 29091-21-2)	65.0%
Other Ingredients:	35.0%
Total:	100.0%

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-834

EPA Est. 62171-MS-001

SCP 834A-M1C 0401

10 POUNDS
NET CONTENTS



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.

Barricade® 65WG

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.

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 perennials and wild-flower plantings
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Active Ingredient:	
Prodiamine	
(CAS No. 29091-21-2)	65.0%
Other Ingredients:	35.0%
Total:	100.0%

EPA Reg. No. 100-834
 EPA Est. 62171-MS-001
 Barricade® trademark of Syngenta
 ©2001 Syngenta
 Syngenta Crop Protection, Inc.
 Turf and Ornamental Products
 Greensboro, North Carolina 27409
 www.syngenta-us.com
 SCP 834A-M1C 0401

10 POUNDS NET CONTENTS

KEEP OUT OF REACH OF CHILDREN.

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

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

First Aid

If on skin: Wash with soap and water. Rinse thoroughly.

If inhaled: Remove victim to clear air.

If in eyes: Flush thoroughly with water for several minutes. Contact a physician if irritation persists.

Environmental Hazards

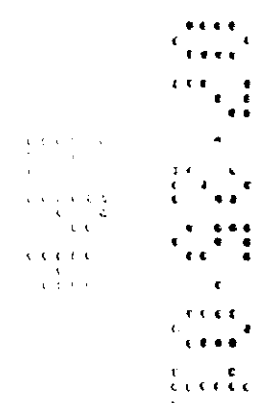
This product has low solubility in water. At the limit of solubility, this product is not toxic to fish. However, at concentrations substantially above the level of water solubility, it may be toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas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

Storage and Disposal

Do not contaminate water, food, or feed by storage or disposal. Store in original container away from fertilizer, feed, or food stuffs and separated from other pesticides. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Triple rinse container (or equivalent) and dispose of in a sanitary landfill or incinerate, or if allowed by state and local authorities, burn locally. Stay out of smoke from burning container.

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 cleanup 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.



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 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.

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
- Waterproof gloves
- Shoes plus socks

WHERE TO USE

Barricade 65WG 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, and in container, field grown, and landscape ornamentals
- hardwood seedling nurseries and established perennial and wildflower plantings
- plants grown for cut foliage production
- 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

1. Do not graze or feed livestock forage cut from areas treated with Barricade 65WG.
2. Follow all applicable directions, restrictions, and precautions on the labels of EPA-registered tank mix partners.
3. Do not blend Barricade 65WG 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

Mixing

Barricade 65WG must be mixed thoroughly in the spray tank to ensure uniform application. Follow these steps:

1. Fill the spray tank 1/4 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 pesticides, it is advisable to test compatibility by mixing the products in a small container first. 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-qt. jar would be 1/100 the volume of a 25 gals./A spray rate. At 1 lb./A the Barricade 65WG rate would be proportional to 4.5 g per qt. Add approximately 1.5 teaspoons to a qt. of water. Calculate amounts for other products based on rate per acre. An approximate volume would be 1.5 teaspoons for each lb./A of a dry formulation and 0.5 teaspoons for each pt./A 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 Formulations	Rate Per		Level Teaspoons
	Acre	1,000 sq. ft.	
Barricade 65WG	1.0 lb.	0.4 oz.	1.5
Dry Tank Mix Partners	1.0 lb.	0.4 oz.	1.5
Liquid Tank Mix Partners	1.0 pt.	0.4 oz.	0.5

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

ESTABLISHED TURF

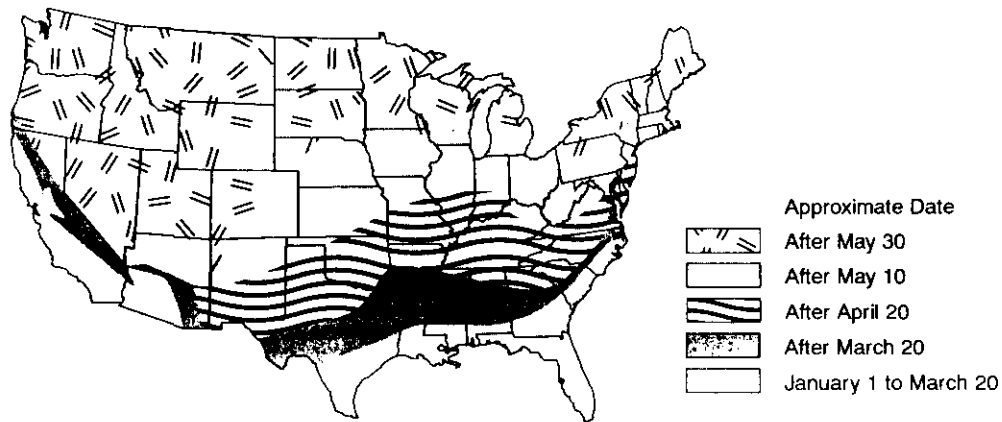
Barricade 65WG is a selective preemergence herbicide that, when properly applied, will control certain grass and broadleaf weeds in established turfgrasses including:

- Golf courses **excluding** putting greens
- Lawns
- Sod nurseries

The maximum amount of Barricade 65WG 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 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



Use Precautions – Turfgrass

1. Do not apply Barricade 65WG 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 65WG 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 65WG to golf course putting greens.**
6. If the depth of the creeping bentgrass root system becomes shallow and root tips contact Barricade 65WG-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,
3. and the maximum amount which can be applied to the turf species per calendar year.

Length of Crabgrass Control*



*Length of control varies by region. This table 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.

Maximum Application Rate of Barricade 65WG Per Calendar Year by Turfgrass Species¹

Turf Species	Lbs. product/A	oz. product/1,000 sq. ft.
Bermudagrass ² Bahia grass Centipedegrass Kikuyugrass Seashore Paspalum St. Augustinegrass ³ Tall Fescue (including turf-type) Zoysiagrass	1.0-2.30 ¹	0.36-0.83
Buffalograss Kentucky Bluegrass Perennial Ryegrass	0.5-1.50 ¹	0.185-0.55
Fine Fescue	0.5-1.15 ¹	0.185-0.42
Creeping Bentgrass (0.5 inches or more in height) ⁴	0.5-1.00 ¹	0.185-0.37

¹ 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 for each turf species. All applications must be made before weed seeds germinate.

² 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.

³ Use an initial rate of 0.75-1.5 lbs./A per application.

⁴ To avoid grass injury, do not apply Barricade 65WG to creeping bentgrass mowed at less than 0.5 inch in height.

Weeds Controlled

When used as directed in this label, Barricade 65WG will control the following weeds:

- | | |
|---|---------------------------------|
| Barnyardgrass | Kochia |
| Bluegrass, Annual (<i>Poa annua</i>) ¹ | Lambsquarter, Common |
| Carpetweed | Lovegrass |
| Chickweed, Common ² | Panicum (Texas, Fall, Browntop) |
| Chickweed, Mouseear (from seed) | Pigweed |
| Crabgrass (Large, Smooth) ³ | Purslane, Common |
| Crowfootgrass | Pusley, Florida |
| Cupgrass, Woolly | Rescuegrass ⁴ |
| Foxtails, Annual | Shepherds Purse ² |
| Goosegrass ⁵ | Signalgrass, Broadleaf |
| Henbit ² | Speedwell, Persian |
| Itchgrass | Sprangletop |
| Johnsongrass (from seed) | Spurge, Prostrate |
| Junglerice | Witchgrass |
| Knotweed ² | Woodsorrel, Yellow (from seed) |

¹ In areas where *Poa annua* is a winter annual, apply Barricade 65WG (see rate table) in August or September to established, non-overseeded turf before *Poa annua* seeds germinate. These timings are approximate. Consult State Extension Service for more specific timing for your area. Also see the section of this label **Poa Annua Control in Established Bermudagrass Overseeded with Perennial Ryegrass (AZ, CA, NV, and TX only)**.

² To control this weed, apply Barricade 65WG in late summer, fall, or winter before weed seeds germinate.

³ **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 1.0-1.15 lbs./A after the soil temperature falls below 50°F but before the ground freezes. This application will control crabgrass the following spring.

⁴ Suppression only.

⁵ In any area a single application of 1-2.3 lbs./A of Barricade 65WG will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, most effective control may be obtained by making an initial application of 1-1.5 lbs./A followed, after 60-90 days, by a second application that does not exceed the maximum rate for that turfgrass species listed in the **Maximum Application Rate Table**.

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.

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

Amount of Barricade 65WG Lbs. Product/A	Interval (Months) Before Overseeding		
	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 (AZ, CA, NV, and TX 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 to 8 weeks before ryegrass overseeding second application: 4 to 8 weeks after overseeding or when perennial ryegrass roots are in the second inch of soil	1 application for 70% or greater control of <i>Poa annua</i> second application may enhance control	1. Some seedling mortality and temporary reduction in root growth of new seedlings may occur. 2. To reduce the potential for seedling mortality, maintain a moist seedbed with light, frequent irrigation. 3. Make no more than 2 applications per year for this use, and do not exceed a total of 1.3 lbs./A per year. 4. Do not make a second application if any injury to the ryegrass is observed after the first application. 5. Do not make a second application unless the product was first applied before overseeding.

CONTAINER, FIELD GROWN, AND LANDSCAPE ORNAMENTALS (INCLUDING CHRISTMAS TREE FARMS)

Application Timing and Information

Barricade 65WG:

1. Will not control emerged weeds.
2. May be applied to newly-transplanted and established ornamentals as 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:

- a. 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.
- b. After application, immediately irrigate the treated area to wash Barricade 65WG from plant surfaces onto soil (watering plants before application may improve the washing process).

Ornamentals and Christmas Tree Farms – Application Sites and Instructions

Site	Application Instructions
Newly-Transplanted Container or Field Nursery Stock	1. Delay application until soil has settled around transplants. 2. Water transplants thoroughly before application. 3. Apply after cuttings form roots and are established. 4. To avoid inhibition of the tissue union, apply before budding/grafting or after buds/grafts have taken.
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	1. Apply as a broadcast, over-the-top, or as a directed spray. 2. Delay application to newly-transplanted ornamentals until soil has settled around transplants.
Bare Ground Application for Container Placement	1. Apply to soil (including mulch, gravel, wood chips, or other permeable base) upon which containerized ornamentals are placed. 2. 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	1. Barricade 65WG may be applied to bulbs or perennial wildflower species listed in the section, Tolerant Ornamental Species . 2. 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/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	1. Use the higher rate for longer control. 2. 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.

*Note: For band application calculate amount per acre:

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{broadcast rate} = \text{amount to apply per acre of field}$$

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 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.
Roundup® or other glyphosate-based products ¹ , Finale®	<ol style="list-style-type: none"> 1. These nonselective tank mix herbicides control most emerged annual broadleaves and grasses. 2. 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. 3. 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.

¹Roundup is one brand of a nonselective herbicide containing glyphosate. Other glyphosate products may also be used.

Tolerant Ornamental Species

Barricade 65WG will not harm most trees, shrubs, vines, and flowers. The species listed below in Table 1 are tolerant to Barricade 65WG. Barricade 65WG is approved for application, except in CA, to the species in Table 2. 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 1 – Tolerant Ornamental Species – All States

Scientific name	Common name
<i>Abies</i> spp.**	Fir species** (Balsam, Fraser, Noble, etc.)
<i>Acer palmatum</i>	Japanese Maple
<i>Acer platanoides</i>	Norway Maple
<i>Actinidia chinensis</i> *	Kiwi*
<i>Agapanthus africanus</i>	Lily-of-the-Nile (African Lily)
<i>Arctostaphylos densiflora</i>	Vine Hill Manzanita
<i>Arctotheca calendula</i>	Cape Weed
<i>Aucuba japonica</i>	Japanese Aucuba
<i>Berberis gladwynensis</i>	Barberry
<i>Berberis julianae</i>	Wintergreen Barberry
<i>Berberis mentorensis</i>	Mentor Barberry
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Berberis verruculosa</i>	Warty Barberry
<i>Buxus microphylla</i>	Japanese Boxwood
<i>Callistemon viminalis</i>	Weeping Bottlebrush
<i>Calluna vulgaris</i>	Scotch Heather
<i>Carpobrotus edulis</i>	Hottentot Fig (Ice Plant)
<i>Cassia artemisoides</i>	Feathery Cassia
<i>Ceanothus rigidus</i>	Wild Lilac
<i>Chamaecyparis pisifera</i>	False Cypress
<i>Cleyera japonica</i>	Cleyera
<i>Citrus</i> spp.*	Citrus species*
<i>Cornus florida</i>	Flowering Dogwood
<i>Cornus stolonifera</i>	American Dogwood
<i>Cortaderia selloana</i>	Pampas Grass
<i>Cotoneaster apiculatus</i>	Cranberry Cotoneaster
<i>Cotoneaster buxifolius</i>	Cotoneaster
<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster
<i>Cotoneaster microphyllus</i>	Rockspray Cotoneaster
<i>Crataegus</i> spp.	Hawthorne
<i>Cupressus sempervirens</i>	Italian Cypress
<i>Delosperma alba</i>	White Trailing Ice Plant
<i>Dodonea viscosa</i>	Hop Bush
<i>Elaeagnus pungens</i>	Silverberry
<i>Euonymus fortunei</i>	Wintercreeper
<i>Euonymus japonica</i>	Japanese Spindle Tree (Evergreen Euonymus)
<i>Euonymus kiautschovica</i>	Spreading Euonymus
<i>Fatsia japonica</i>	Japanese Aralia
<i>Forsythia intermedia</i>	Border Forsythia
<i>Forsythia viridissima</i>	Greenstem Forsythia

* Do not use on food producing trees, vines, or plants.

** Not for use on container grown plants.

continued...

Table 1 – Tolerant Ornamental Species – All States (continued)

Scientific name	Common name
<i>Gardenia jasminoides</i>	Gardenia, Cape-Jasmine
<i>Gladiolus</i> spp.**	Gladiolus species**
<i>Hedera helix</i>	English Ivy
<i>Hibiscus</i> **	Rose of Sharon**
<i>Hibiscus Rosa-sinensis</i> **	Chinese Hibiscus**
<i>Ilex cornuta</i> **	Chinese Holly**
<i>Ilex crenata</i>	Japanese Holly
<i>Ilex opaca</i>	American Holly
<i>Ilex pernyi</i>	Holly
<i>Ilex vomitoria</i>	Yaupon Holly
<i>Iris</i> spp.**	Iris species**
<i>Jasminium nudiflorum</i>	Winter Jasmine
<i>Juniperus chinensis</i>	Chinese Juniper
<i>Juniperus conferta</i>	Shore Juniper
<i>Juniperus horizontalis</i>	Creeping Juniper
<i>Juglans</i> spp.*	Walnut*
<i>Justicia brandegeana</i>	Shrimp Plant
<i>Lagerstromia indica</i>	Crape Myrtle
<i>Ligustrum amurense</i>	Amur Privet
<i>Ligustrum japonicum</i>	Japanese Privet
<i>Ligustrum lucidum</i>	Glossy Privet (Wax-Leaf)
<i>Liriope muscari</i>	Big Blue Lillyturf
<i>Lonicera japonica</i>	Japanese Honeysuckle
<i>Lonicera tatarica</i>	Tatarian Honeysuckle
<i>Magnolia</i> spp.**	Magnolia species**
<i>Malephora luteola</i>	Ice Plant
<i>Malus</i> spp.*	Crabapple*
<i>Nandina domestica</i>	Heavenly Bamboo
<i>Narcissus</i> spp.**	Narcissus species**
<i>Nerium</i> spp.	Oleander
<i>Olea europaea</i> **	Olive*
<i>Ophiopogon japonicus</i> **	Mondo Grass**
<i>Osteospermum fruticosum</i>	Trailing African Daisy
<i>Oxydendrum arboreum</i>	Sourwood
<i>Persea americana</i> **	Avocado*
<i>Photinia fraseri</i>	Frasier's Photinia (Redtip)
<i>Picea</i> spp.**	Spruce species** (Colorado Blue, Norway, etc.)
<i>Pieris japonica</i>	Lily-of-the-Valley Shrub
<i>Pinus brutia</i>	Calabrian Pine
<i>Pinus canariensis</i>	Canary Island Pine
<i>Pinus elliotii</i>	Slash Pine
<i>Pinus halepensis</i>	Aleppo Pine
<i>Pinus nigra</i>	Austrian Black Pine
<i>Pinus palustris</i>	Longleaf Pine
<i>Pinus radiata</i>	Monterey Pine
<i>Pinus strobus</i>	Eastern White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Pinus taeda</i>	Loblolly Pine
<i>Pinus thunbergiana</i>	Japanese Black Pine
<i>Pinus virginiana</i>	Virginia Pine
<i>Pistacia</i> spp.*	Pistachio*
<i>Pittosporum rhombifolium</i>	Queensland Pittosporum
<i>Pittosporum tobira</i>	Japanese Pittosporum
<i>Podocarpus macrophyllus</i>	Japanese Yew
<i>Prunus laurocerasus</i>	English Laurel
<i>Prunus</i> spp.*	Almond, Apricot, Nectarine, Peach, Plum, and Prune*
<i>Pseudotsuga menziesii</i> **	Douglas Fir**
<i>Pyracantha coccinea</i>	Firethorn Scarlet
<i>Pyracantha fortuneana</i>	Firethorn
<i>Pyracantha koidzumii</i>	Firethorn
<i>Pyrus</i> spp.	Bradford Pear spp.
<i>Quercus rubra</i>	Oak species
<i>Raphiolepis indica</i>	Indian Hawthorne
<i>Rhododendron</i> (including Azalea)	'Coral Bells' 'Formosa' 'Hino-crimson' 'PJM' 'Roseum Elegans'
<i>Rosa banksiae</i>	Lady Bank's Rose
<i>Rosmarinus officinalis</i> *	Rosemary*

* Do not use on food producing trees, vines, or plants.

** Not for use on container grown plants.

continued...

Table 1 – Tolerant Ornamental Species – All States (continued)

Scientific name	Common name
<i>Rumohra adiantiformis</i>	Leatherleaf Fern
<i>Santolina virens</i>	
<i>Sedum album</i>	Stonecrop
<i>Syzygium paniculatum</i>	Japanese Boxcherry
<i>Taxus cuspidata</i>	Japanese Yew
<i>Taxus media</i>	Yew
<i>Thuja occidentalis</i>	American Arborvitae
<i>Trachelospermum asiaticum</i>	Star Jasmine
<i>Tsuga canadensis</i>	Canada Hemlock
<i>Tulipa</i> spp.	Tulip species
<i>Viburnum japonicum</i>	Japanese Viburnum
<i>Viburnum odoratissimum</i>	Sweet Viburnum
<i>Viburnum plicatum</i>	Japanese Snowball
<i>Viburnum rigidum</i>	Canary Island Viburnum
<i>Viburnum tinus</i>	Laurustinus
<i>Viburnum trilobium</i>	Cranberry Bush
<i>Viburnum wrightii</i>	Leatherleaf Viburnum
<i>Vinca major</i>	Vinca
<i>Vinca minor</i>	Dwarf Periwinkle
<i>Vitis</i> spp.*	Grape*
<i>Weigela florida</i>	Old Fashioned Weigela
<i>Yucca aloifolia</i>	Spanish Bayonet
<i>Yucca filamentosa</i>	Yucca, Adam's Needle

* Do not use on food producing trees, vines, or plants.

** Not for use on container grown plants.

Table 2 – Tolerant Ornamental Species/Varieties – All States Except CA

Scientific name	Common name
<i>Abelia grandiflora</i>	Abelia: Sherwood
<i>Achillea</i> spp.	Yarrow: King Edward
<i>Agapanthus orientalis</i>	
<i>Akebia quintata</i>	Five-Leaf or Chocolate Vine
<i>Allium cernuum</i>	Lady's Leek, Nodding Onion
<i>Anemone hybrida</i>	Japanese Anemone
<i>Aquilegia</i> spp.	Aquilegia: Red and Gold
<i>Artemisia</i> spp.	Wormwood; Silver Mound, Castle
<i>Aster</i> spp.	Aster: Bonny Blue, Purple Dome
<i>Aster X frikartii</i>	
<i>Athyrium filix-femina</i>	Lady Fern; Fern Lady
<i>Begonia</i> spp.	Fibrous Begonia: Hardy Grandis
<i>Bergenia cordifolia</i>	
<i>Boltonia asteroides</i>	Snowbank
<i>Bougainvillea</i> spp.	Bougainvillea
<i>Buddleia davidii</i>	Butterfly-Bush (Dwarf Blue); Royal Red
<i>Callistemon citrinus</i>	Crimson Bottlebrush
<i>Campanula carpatica</i>	Tussock Bellflower; (White Clips)
<i>Campis X tagliabuana</i>	Trumpet Creeper, Trumpet Flower, Madame Galen
<i>Ceratostigma plumbaginoides</i>	
<i>Chrysanthemum nipponicum</i>	
<i>Coreopsis</i> spp.	Coreopsis (Calliopsis): Early Sunrise, Moonbeam
<i>Crocsmia</i> spp.	Lucifer
<i>Delosperma</i> spp.	Cooperi Pink
<i>Delphinium</i> spp.	Larkspur; Blue Elf
<i>Dianthus deltoides</i>	Dianthus, Maiden Pinks 'Zing'
<i>Dianthus gratianopolitanus</i>	Cheddar Pink
<i>Echinacea purpurea</i>	Coneflower, Purple, Magnus
<i>Forsythia suspensa</i>	Weeping Forsythia
<i>Gaillardia</i> spp.	Gaillardia, Blanket Flower: 'Goblin'
<i>Gaura</i> spp.	
<i>Gentiana dahlurica</i>	Gentian
<i>Geranium cinereum</i>	Cranesbill
<i>Gypsophila repens</i>	Baby's Breath
<i>Helianthemum</i> spp.	Sunrose
<i>Hemerocallis</i> spp.	Daylily: Aztec Gold, Stella De Oro, Tender Love
<i>Heucherella</i> spp.	Coral Bell; Bridget Bloom
<i>Hibiscus</i> spp.	Mallow; Disco Belle White
<i>Hosta plantaginea</i>	Hosta, Plantain Lily (Fragrant)
<i>Hosta sieboldiana</i>	Hosta, 'Searsucker'
<i>Houttuynia cordata</i> var. <i>variegata</i>	
<i>Hydrangea macrophylla</i>	Bigleaf Hydrangea
<i>Inula ensifolia</i>	

continued...

Table 2 – Tolerant Ornamental Species/Varieties – All States Except CA (continued)

Scientific name	Common name
<i>Iris ensata</i>	Sword-Leaved Iris; Jodlesong
<i>Iris siberica</i>	Siberian Iris; Cabernet
<i>Juniperus davurica</i>	Parsoni
<i>Lagerstromia indica X fauriei</i>	Crape Myrtle; Tuscarora
<i>Lantana montevidensis</i>	Weeping Lantana
Lavender spp.	Lavender; Munstead
<i>Leontopodium alpinum</i>	Edelweiss
<i>Ligustrum sinense</i>	Chinese Privet; Variegata
<i>Lilium</i> spp.	Lily; Jazz
<i>Liriope muscari</i> var. <i>variegata</i>	Liriope, Variegated
<i>Liriope spicata</i>	Liriope, Creeping
<i>Lobelia cardinalis</i>	Cardinal Flower, Indian Pink
<i>Loropetalum chinense</i>	Burgundy
<i>Lythrum</i> spp.	Loosestrife; Modern Pink
<i>Miscanthus sinensis</i> **	Yaku Jima**, Silberfeder**
<i>Oenothera missouriensis</i>	Evening Primrose
<i>Osmanthus heterophyllus</i>	Osmanthus (False Holly); Gulf Tide
<i>Paeonia suffruticosa</i>	Tree Peony
<i>Pennisetum setaceum</i> **	Fountain Grass (Dwarf)**
<i>Perovskia atriplicifolia</i>	Dragonhead, False; Vivid
<i>Physostegia virginiana</i>	Oak, Shumard's Red
<i>Quercus Shumardii</i>	Yedda Hawthorne
<i>Raphiolepis umbellata</i>	'Delaware Valley White'
<i>Rhododendron</i> (including <i>Azalea</i>)	'Flame Creeper' 'Girard Crimson' 'George L. Tabor' 'Wakeiebisu' 'White Gumpo'
<i>Rudbeckia</i> spp.	Black-Eyed Susan; Goldstrum
<i>Saxifraga</i> spp.	Saxifrage; Purple Dome
<i>Scabiosa</i> spp.	Pincushion Flower
<i>Sedum cauticola</i>	Stonecrop; Lidakense
<i>Sedum dasyphyllum</i>	Stonecrop
<i>Sedum spurium</i>	Stonecrop; Dragon's Blood
<i>Spiraea bumalda</i>	Spiraea; Anthony Waterer
<i>Syzygium paniculatum</i>	Australian Brushcherry
<i>Teucrium</i> spp.	Germander
<i>Thalictrum dipterocarpum</i>	Meadow Rue
<i>Veronica</i> spp.	Veronica, Speedwell; Sunny Border
<i>Viburnum suspensum</i>	Arrowwood Viburnum

** Not for use on container grown plants.

NEW PLANTINGS, REPLANTING, AND ROTATIONAL PLANTINGS

Nursery, landscape, or noncropland 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.

STORAGE AND DISPOSAL

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

Storage

Store in original container away from fertilizer, feed, or food stuffs and separated from other pesticides.

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.

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 cleanup and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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, while mixing or handling the concentrated material, may cause allergic reactions in some individuals.

First Aid

If on skin: Wash with soap and water. Rinse thoroughly.

If inhaled: Remove victim to clear air.

If in eyes: Flush thoroughly with water for several minutes. Contact a physician if irritation persists.

Personal Protective Equipment**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
- Waterproof gloves
- Shoes plus socks

Mixers and Loaders must wear:

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

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 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.

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.

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