BARRICADE	GROUP	3	HERBICIDE
-----------	-------	---	-----------



# Turf Fertilizer Plus 0.38% Barricade® Herbicide (0-0-7)

For selective preemergence control of grass and broadleaf weeds in:

- · Established turfgrasses (excluding golf course putting greens), lawns, athletic fields, parks, and sod farms
- Field-grown and landscape ornamentals
- Established perennials and wildflower plantings
- Non-crop areas, including landscape beds, ornamentals, and established perennial wildflower plantings on or surrounding municipal grounds and government installations, managed rights-of-way for transportation systems and utilities (including, roadways, roadsides, railways and equipment vards)

Active	Ingred	lent:
--------	--------	-------

Prodiamine\* 0.38%

Other Ingredients: 99.62%
Total: 100.00%

\*CAS No. 29091-21-2

EPA Reg. No. 100-1339-49991

EPA Est. 49991-TX-2

# KEEP OUT OF REACH OF CHILDREN CAUTION

Guaranteed Fertilizer Analysis:

Total Nitrogen 0% (N) 50 pounds Available Phosphate 0% (P<sub>2</sub>0<sub>5</sub>) Net Weight Soluble Potash 7% (K<sub>2</sub>0)

22.68 KGS

Derived from: Diammonium Phosphate, Urea, Muriate of Potash, Dolomitic Limestone

	FIRST AID			
If on skin or	Take off contaminated clothing.			
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.			
J	Call a poison control center or doctor for treatment advice.			
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			
	Call a poison control center or doctor for treatment advice.			
If inhaled	Move person to fresh air.			
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if			
	possible			
	Call a poison control center or doctor for treatment advice.			
	ct container or label with you when calling a poison control center or doctor or going for treatment. You may also			
contact 1-800-2	22-1222 for emergency medical treatment information.			
	HOT LINE NUMBER			
	For 24 Hour Medical Emergency Assistance (Human or Animal) or			
	Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),			
	Call			
	1-800-222-1222			

#### PRECAUTIONARY STATEMENTS

# **Hazards to Humans and Domestic Animals**

# **CAUTION**

Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant, waterproof gloves. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# **Personal Protective Equipment (PPE)**

# Mixers, loaders, applicators and other handlers must wear:

- □ Long-sleeved shirt and long pants
- ☐ Shoes plus socks
- ☐ Chemical-resistant gloves made of any waterproof material

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

# **Engineering Control Statements**

When handlers use closed systems, enclosed cabs, or aircraft 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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **Environmental Hazards**

This product has low solubility in water. At the limits of solubility, this product is not toxic to fish. However, at concentrations 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 waters.

NON-TARGET ORGANISM ADVISORY STATEMENT: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of nontarget organisms by following label directions intended to minimize spray drift.

# CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, presence of other materials or other influencing factors in the use of the product, which are beyond the control of BONUS CROP FERTILIZER, INC. ("BCF") or Seller. To the extent permitted by applicable law, Buyer and User agree to hold BCF and Seller harmless for any claims relating to such factors.

BCF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or BCF, and (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, BCF MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

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

BCF 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 BCF.

# **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 requirement specific to your State and Tribe, consult the State/Tribal agency responsible for pesticide regulation.

- For use on plants intended for aesthetic purposes or climatic modification.
- Read entire label before using this product.

# 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 made of any waterproof material
- Shoes plus socks

# NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses

Do not enter or allow others to enter until dusts have settled.

Turf Fertilizer Plus 0.38% Barricade® Herbicide controls certain grass and broadleaf weeds before they emerge and provides residual control in established turfgrasses, and ornamentals and other non-crop area. Turf Fertilizer Plus 0.38% Barricade® Herbicide inhibits shoot and root growth in susceptible weeds. Turf Fertilizer Plus 0.38% Barricade® Herbicide will not control established weeds. Weed control is most effective when Turf Fertilizer Plus 0.38% Barricade® Herbicide is activated by at least 0.5 inch of rainfall or irrigation before weed seeds germinate and within 14 days following application.

#### **Weeds Controlled**

Barnyardgrass Bluegrass, Annual (Poa annua)1 Carpetweed

Chickweed, Common Chickweed, Mouseear (from seed)

Crabgrass (Large, Smooth)2 Crowfootgrass

Cupgrass, Woolly Foxtails, Annual Goosegrass<sup>3</sup>

Henbit Itcharass

Johnsongrass (from seed)

Junglerice Knotweed Kochia

Lambsquarter, Common Lovegrass Panicum (Texas, Fall,

Browntop) Pigweed

Purslane, Common Pusley, Florida Rescuegrass<sup>4</sup> Shepherd's Purse Signalgrass, Broadleaf Speedwell, Persian

Sprangletop Spurge, Prostrate

Witchgrass Woodsorrel, Yellow (from seed)

In areas where Poa annua is a winter annual, apply Turf Fertilizer Plus 0.38% Barricade® Herbicide (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

<sup>2</sup>Fall Applications for Spring Crabgrass Control in Cool-Season Grasses: In those areas where the ground freezes in the winter, Turf Fertilizer Plus 0.38% Barricade® Herbicide can be applied in the fall after the soil temperature falls below 50°F but before the ground freezes. This application will control crabgrass the following spring.

<sup>3</sup>In many areas, a single application will control goosegrass. However, under heavy goosegrass pressure and/or an extended growing season, make a second application 60-90 days later to ornamentals and lawns (if recommended for your lawn grass species).

### WEED RESISTANCE MANAGEMENT

BARRICADE GROUP HERBICIDE

For resistance management, Barricade 0.38% Herbicide is a Group 3 herbicide.

Any weed population may contain or develop plants naturally resistant to Barricade 0.38% Herbicide and other Group 3 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed. To delay herbicide resistance, take one or more of the following steps: 🗆 Rotate the use of Barricade 0.38% Herbicide or other Group 3 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

☐ Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

☐ Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

☐ Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include:

- (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds.
- (2) a spreading patch of non-controlled plants of a particular weed species.
- (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and planting clean seed.

☐ If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.

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

☐ For further information or to report suspected resistance, contact Syngenta Crop Protection at 1-800-334-9481.

# **ESTABLISHED TURF**

#### Golf courses (except putting greens), lawns, parks, athletic fields, sod farms How to Apply

- Do not apply more than 9 pounds product/1,000 sq. ft. (1.5 lb a.i./A) per calendar year.
- Do not make more than two applications per calendar year.
- Refer to Rates for Grass Species in table and Granular Spreader Settings table for spreader settings to deliver the rate recommended for your lawn grass species. Uniform coverage is necessary to provide the most effective level of control.
- Apply Turf Fertilizer Plus 0.38% Barricade® Herbicide to the turf in the early spring prior to crabgrass emergence. See Crabgrass Germination Dates in the map below for the approximate timing in your area. Always apply before weeds emerge. Turf Fertilizer Plus 0.38% Barricade® Herbicide will not control emerged crabgrass.
- If you have a known serious weed problem or live in an area with an extended growing season, you may need to make a second application 60-90 days later.
- If you live in Zones D and E (see Crabgrass Germination Dates map), you may apply a higher rate (Medium or High Rate) or make two applications for more effective crabgrass control, if recommended for your turfgrass species.
- Do not make a second application to Fine Fescue, Creeping Bentgrass and newly sprigged and plugged Bermudagrass. Do not make a second application if you applied the High Rate to Buffalograss, Kentucky Bluegrass or Perennial Ryegrass.
- For best control After application, water in with ½ inch of water within 14 days, either from watering or rain.

<sup>4)</sup>Suppression only.

# **Crabgrass Seed Germination Dates**



Rates for Lawn Grass Species

	Application Schedule <sup>1</sup>	Application Rate <sup>2</sup>		
Bermudagrass (established)	First Application	Base	Medium	High
Bahiagrass Centipedegrass Kikuyugrass Seashore Paspalum St. Augustinegrass Tall Fescue (including turf-type) Zoysiagrass	Second Application (optional)	Base or Medium or High	Base or Medium or High	Base or Medium or High
Buffalograss Kentucky Bluegrass	First Application	Base	Medium	High
Perennial Ryegrass	Second Application (optional)	Base or Medium	Base or Medium	-
Fine Fescue (including Red Fescue)	ding Red Fescue) One Application Only		-	-
Creeping Bentgrass (0.5 inch and greater height)	One Application Only	Base or Medium	-	-
Bermudagrass (newly sprigged and plugged) <sup>4</sup>	One Application Only	Base or Medium	-	-

- 1.A second application may be necessary because of heavy weed pressure or extended growing season.
- 2.See Granular Spreader Settings table for spreader settings to deliver the rate.
- 3.To avoid grass injury, do not apply Turf Fertilizer Plus 0.38% Barricade® Herbicide to creeping bentgrass mowed at less than 0.5 inch in height.
- 4. Newly sprigged or plugged Bermudagrass rooting may be temporarily slowed.

Granular Spreader Settings 1,2,3

Make and Models	[0.38 lb. a.i./A] [2.3 lb. product/1,000 sq. ft.] Base Rate (Treats 16,130 sq. ft.)	[0.5 lb. a.i./A] [3.0 lb. product/1,000 sq. ft.] Medium Rate (Treats 16,130 sq. ft.)	[0.75 lb. a.i./A] [4.5 lb. product/1,000 sq. ft.] High Rate (Treats 16,130 sq. ft.)
Bigfoot	N	Р	R
Earthway	17	18	22
Lesco Broadcast 020093	H 1/4	J	M 1/4
Lesco Broadcast 705698	18 1/2	21 1/2	27 1/2
Scotts Rotary	L 1/4	m	0
Vicon	31	34	42

<sup>&</sup>lt;sup>1</sup>Assume 3 mph walking speed.

## **Use Precautions**

- Do not apply to putting greens or turfgrass 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 into the second inch of soil and exposed edges have filled in.
- Application of Turf Fertilizer Plus 0.38% Barricade® Herbicide to turf stressed by drought, low fertility, or pest damage may result in turfinjury.
- Disturbing the herbicide jbarrier with cultural practices such as disking may result in reduced weed control.

**Seeding:** Do not apply to overseeded areas for 60 days after seeding, or until after the second mowing, whichever is longer. Do not overseed for 4 months after last applications of this product.

<sup>&</sup>lt;sup>2</sup>It is recommended that you calibrate your spreader before application since manufacturer's settings can vary among the same model of spreader. <sup>3</sup>Do not apply more than 1.5 lbs. ai/A per year.

#### LANDSCAPE, FIELD GROWN ORNAMENTALS AND NON-CROP AREAS

### How to Apply

- Apply Turf Fertilizer Plus 0.38% Barricade® Herbicide as a broadcast, over-the-top application at 3.9-9.0 lbs. product/1,000 sq. ft. Use higher rates when weed pressure was a severe problem in the past.
- Make a single application in fall and/or spring prior to weed emergence. Another application may be made 60-90 days later, if necessary. Do not exceed a total of 9.0 lbs. product/1,000 sq. ft per year.
- After application, water in with ½ inch of water within 14 days, either from watering or rain or, incorporate into the top 1-2 inches of soil within 14 days after application.
- On established ornamentals, watering or rainfall soon after application will wash residues off plant foliage and activate Turf Fertilizer Plus 0.38% Barricade® Herbicide in the soil.
- On newly-transplanted ornamentals, apply after the soil has settled around the transplants.
- · For best weed control, apply to soil free of clods, weeds, and debris such as leaves.
- · Prior to application, control existing weeds by hand weeding, cultivation, or by the use of an herbicide for emerged weeds.
- Plants under stress (such as heat, drought, or frost damage) may be sensitive to Turf Fertilizer Plus 0.38% Barricade® Herbicide.

#### STORAGE AND DISPOSAL

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

Pesticide Storage Store in a cool, dry place. Keep container closed and away from food, feedstuffs, and domestic water supplies. Pesticide Disposal Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. Container Handling Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Pesticide Disposal and Container Handling [Household/Residential] Nonrefillable container. Do not reuse or refill this container. If empty: Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency or 1-800-336-2434 for disposal instructions. Never place unused product down any indoor or outdoor drain. Barricade® is a trademark of a SYNGENTA Group Company

Bonus Crop Fertilizer, Inc. P. O.Box 1062 Greenville, Texas 75403-1062 EPA # 100-1339-49991