

PM 23 45639-68

yellow 10/9

OCT 24 1996

Ms. Vickie Forster  
AgrEvo USA Company  
Little Falls Centre One  
2711 Centerville Road  
Wilmington, DE 19808

Dear Ms. Forster:

SUBJECT: Label Amendment Adding Use Precautions, Revising  
Varietal Tolerance Section, Clarifying Use on  
Specific Cool and Warm Season Grasses, and  
Excluding Use on Sod Farms in Arizona.  
Prograss EC Herbicide  
EPA Registration No. 45639-68  
Your Application Dated September 27, 1996

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable provided you make the following changes:

1. Add the statement "Contains Petroleum Distillates" as a footnote to the ingredient statement.
2. Add the following Note To Physician in close proximity to, but clearly distinguished from, the Statement of Practical Treatment:

"Note To Physician: May pose an aspiration pneumonia hazard."

3. Revise the Statement of Practical Treatment to read as follows:

"IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention."

IF SWALLOWED: Call a doctor or get medical attention. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Avoid alcohol.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention."

RD:STANTON:PM Team 23:Rm. 235:CM-2:305-5218:Disk #3:S512879.LET

## CONCURRENCES

SYMBOL ▶	7505C							
SURNAME ▶	S. Stanton							
DATE ▶	Oct 23, 1996							

4. Revise the first paragraph under Hazards to Humans and Domestic Animals to read as follows:

"Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin."

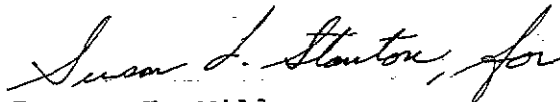
The revisions specified in items 1, 2, 3 and 4, above, are required, based on the product's composition (i.e. > 10% petroleum distillates) and acute toxicity profile, which, according to our records, is as follows:

Study	Toxicity Category
Acute Oral Toxicity	IV
Acute Dermal Toxicity	III
Acute Inhalation Toxicity	IV
Primary Eye Irritation	I
Primary Skin Irritation	III

5. Delete the "First Aid" statements immediately above the Personal Protective Equipment section under Hazards to Humans and Domestic Animals. These statements are redundant, incomplete and/or in conflict with the Statements of Practical Treatment. Similarly, you should delete the following statements immediately above the Spanish language warning on the front panel: "CORROSIVE, CAUSES EYE DAMAGE" & "WEAR GOGGLES OR FACE SHIELD WHEN HANDLING".

A stamped copy of the label is enclosed for your records. Please submit one copy of the final printed labeling before you release the product for shipment.

Sincerely yours,



Joanne I. Miller  
Product Manager (23)  
Fungicide-Herbicide Branch  
Registration Division (7505C)

Enclosure

3049

# Prograss

## EMULSIFIABLE CONCENTRATE

Selective Herbicide For Use By Professional Applicators On Ornamental Turf Only

*"Not for Use on Commercial Sod Farms in Arizona"*

### ACTIVE INGREDIENTS:

ethofumesate: (2-ethoxy-2, 3-dihydro-3,  
3-dimethyl-5-benzofuranyl methanesulfonate)\* 19%

INERT INGREDIENTS: 81%

TOTAL 100%

This product contains 1.5 lb active ingredient per gallon

EPA Reg. No. 45639-68

\*Protected by U.S. Patent No. 4,072,495

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

OCT 24 1996

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

45639-68

RECD EPA/OPP/DPD1

OCT -7 P2:19

KEEP OUT OF REACH OF CHILDREN

DANGER — PELIGRO

CORROSIVE, CAUSES EYE DAMAGE

WEAR GOGGLES OR FACE SHIELD WHEN HANDLING

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician.

**IF ON SKIN:** Flush with plenty of water for at least 15 minutes.

**IF IN EYES:** Immediately flush with plenty of water for at least 15 minutes. Call a physician.

IN CASE OF MEDICAL EMERGENCIES OR HEALTH AND SAFETY INQUIRIES, OR IN CASE OF FIRE, LEAKING, OR DAMAGED CONTAINERS, INFORMATION MAY BE OBTAINED BY CALLING 800-228-5635, EXT. 202.

### PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS  
AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes eye damage. Do not get in eyes. Harmful if absorbed through skin. Avoid contact with skin.

First Aid—In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Get medical attention if skin irritation persists.

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow instructions for category "G" on an EPA chemical-resistant category selection chart.

- x Long-sleeve shirt & long pants
- x Chemical-resistant gloves such as barrier laminate or viton
- x Shoes plus socks
- x Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

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### ENGINEERING CONTROLS STATEMENT

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

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.

### ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

### PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flames.

### STORAGE AND DISPOSAL

**STORAGE:** Store in a cool place above 34°F.

**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

### DO NOT REUSE EMPTY CONTAINER

### GENERAL INFORMATION

PROGRASS® is an emulsifiable formulation containing 1.5 lbs. active ingredient per U.S. gallon for use on established perennial ryegrass, Kentucky Bluegrass, creeping bentgrass, turf-type tall fescue, St. Augustine grass, and dormant bermudagrass for the control and/or suppression of specific annual grasses and broadleaf weeds. It may also be used, as directed, after overseeding specific grasses.

PROGRASS is intended for professional use only on the ornamental turf of sites such as golf courses, sod farms, parks, cemeteries, lawns of commercial establishments and homeowner lawns (see Use Precautions below).

PROGRASS has both preemergent and early (two-leaf stage) postemergent activity; it is used most effectively in programs emphasizing both approaches.

## WEED SPECIES CONTROLLED PREEMERGENCE

### Annual Grasses

Annual bluegrass .....	<i>Poa annua</i>
Large crabgrass .....	<i>Digitaria sanguinalis</i>
Barnyardgrass .....	<i>Echinochloa crus-galli</i>
Green foxtail .....	<i>Setaria viridis</i>
Yellow foxtail .....	<i>Setaria glauca</i>
Canarygrass .....	<i>Phalaris canariensis</i>

### Annual Broadleaves

Burclover .....	<i>Medicago</i> sp.
Common chickweed .....	<i>Stellaria media</i>
Common purslane .....	<i>Portulaca oleracea</i>
Redroot pigweed .....	<i>Amaranthus retroflexus</i>

PROGRASS will also reduce competition from:

Yellow nutsedge .....	<i>Cyperus esculentus</i>
Purple nutsedge .....	<i>Cyperus rotundus</i>

## POSTEMERGENCE

### Annual Grasses

Annual bluegrass .....	<i>Poa annua</i>
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### Annual Broadleaves

Common chickweed .....	<i>Stellaria media</i>
White clover .....	<i>Trifolium repens</i>

## PREEMERGENCE/EARLY POSTEMERGENCE

### Annual Grasses

Smooth crabgrass .....	<i>Digitaria ischaemum</i>
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## USE PRECAUTIONS

- % PROGRASS should be used only for recommended purposes and at the recommended rates (DO NOT OVERTREAT).
- % Avoid overlapping when spraying since turf injury may result.
- Use of a spray colorant or indicator in the spray tank is recommended so that spray pattern overlapping can be avoided.
- % Avoid applications with flood jet nozzles and hand-held sprayers, since treatments may not be uniform.
- % Do not apply this product through any type of irrigation system.
- % PROGRASS application is most effective on healthy, vigorously growing turf. A soil fertility test is the best method to determine fertility needs prior to PROGRASS treatment.
- % PROGRASS may be applied to homeowner lawns by licensed or certified applicators. PROGRASS is not intended for use by homeowners.
- Overseeding is recommended in conjunction with Prograss applications to achieve conversion to desired turfgrass species and to avoid stand thinning due to annual bluegrass loss.
- % When overseeding, use the rate of PROGRASS recommended for the overseeded species. In mixed stands of established turfgrasses, use the rate recommended for the *least* tolerant species.
- % Do not apply PROGRASS within 8 weeks following the application of a Plant Growth Regulator. A PROGRASS program may be initiated on creeping bentgrass 3 weeks after a single application of PRIMO has been applied.
- % PROGRASS application is recommended for golf course fairways, roughs, and tees but at fairway-height only. *Do not apply on greens.*
- % Do not apply PROGRASS to zoysiagrass and hard or fine fescue; serious injury may result.

## DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Do not graze livestock on treated turf. Do not feed treated grass clippings to livestock. Read entire Use Precautions, Directions for Use, and Disclaimer of Warranties before using this product.

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 in your State 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 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.

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 barrier laminate or Viton
- ✕ Shoes plus socks
- ✕ Protective eyewear

## 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.

## SPRAY EQUIPMENT, APPLICATION, AND PRECAUTIONS

Apply PROGRASS using standard, low pressure (20–50 psi) spray equipment. Spray equipment should be carefully calibrated before use and checked frequently during application. Addition of a spray indicator may improve treatment uniformity. The tank and line should be cleaned and rinsed *before* and *after* using PROGRASS.

## VARIETAL TOLERANCE

The following turfgrass cultivars have shown tolerance to PROGRASS; however, all species and varieties have not been tested. PROGRASS has been used safely on the following turfgrass cultivars, but its use is not strictly limited to these. Before large scale use of PROGRASS on other cultivars, a tolerance test on a small area is recommended.

- ✕ **PERENNIAL RYEGRASS**—Acclaim, Blazer, Dasker, Derby, Elka, Fiesta, Goalie, Hunter, Linn, Loretta, Manhattan II, Palmer, Pennfine, Regal, Yorktown
- ✕ **KENTUCKY BLUEGRASS**—Adelphi, American, Aspen, Asset, Challenger, Classic, Emundi, Huntsville, Georgetown, Glade, Haga, Julic, Liberty, Merit, Midnight, Monopoly, Mystic, Parade, Rugby, Sydsport, Touchdown, P-104, Ba 69–82
- ✕ **CREEPING BENTGRASS**—Carmen, Cobra, Forbes 89-12, Highland, Lopez, Mariner, National, Normarc 101, Penncross, Providence, Putter, Southshore, SR1020, Viper have shown good to excellent tolerance to PROGRASS. Injury has been noted on Emerald, Penneagle and Pennlinks occasionally. PROGRASS may cause serious injury to Cohansey, Colonial, south German varieties, Egmont, Bardot, BR1518, Tracenta, Allure, Astoria, and SR 7100.
- ✕ **TURF-TYPE TALL FESCUE**—America, Arid, Mustang
- ✕ **ST. AUGUSTINE GRASS**—Raleigh
- ✕ **DORMANT BERMUDAGRASS**—Tifgreen, Tidwarf, Common bermudagrass is more susceptible to PROGRASS injury than hybrid bermudagrass.

## GENERAL RECOMMENDATIONS

Fall applications to turfgrass sites to control annual bluegrass (*Poa annua*) are most effective if application is initiated during the period of maximum weed germination and ended as close to the first killing freeze as possible.

Spring applications may be made during the period of maximum weed germination. Consult the university extension service or weed science specialist for these dates in your locality.

**SEE CHART FOR USE RATES AND TIMINGS. READ TEXT BELOW FOR SPECIFIC RECOMMENDATIONS FOR EACH TYPE OF GRASS!**

**COOL SEASON TURFGRASSES**

**I. PERENNIAL RYEGRASS**

Application to perennial ryegrass in early to mid-fall or mid-spring is recommended during the primary period of annual bluegrass germination in early fall or late spring, and up to 30 days after annual bluegrass emergence. Spring applications should be used in conjunction with a fall application. Consult Extension Service or University weed specialists for date(s) annual bluegrass germinates in your area.

When overseeding with perennial ryegrass, apply PROGRASS to the seeded area 1 to 2 weeks after emergence of the ryegrass seedlings, when the seedlings are approximately 1" tall or after the first cutting. For overseeding, the soil should be prepared according to recommended horticultural practice. Remove or thoroughly work thatch, as it can reduce the effectiveness of the PROGRASS treatment. Delay application of straw or other mulch until after PROGRASS application. Application to overseeded perennial ryegrass in the fall or spring will also reduce competition from selected broadleaf weeds and crabgrass.

**II. KENTUCKY BLUEGRASS**

Apply PROGRASS to bluegrass not less than 8 weeks after germination. Bluegrass overseeded with ryegrass may be treated one to two weeks after ryegrass emergence.

Do not re-seed with Kentucky Bluegrass until six (6) weeks after the last PROGRASS application. For fall application programs of PROGRASS, alternatives are to seed dormant bluegrass in the late fall or to delay re-seeding until the spring. Kentucky bluegrass sod quality during the spring may be reduced following fall applications of PROGRASS.

**III. CREEPING BENTGRASS**

For golf course use, PROGRASS may be applied safely to bentgrass cut at fairway height. Applications of PROGRASS should be avoided in poorly drained and/or heavily shaded turf areas which are more prone to herbicide injury. Tank-mixing N-Sure or Coron at 10 oz per 1000 ft<sup>2</sup> with PROGRASS may improve creeping bentgrass turf tolerance and improve creeping bentgrass conversion.

A spring application of PROGRASS following fall applications is useful in further reducing populations of annual bluegrass. The application should follow a spring overseeding program and should occur no earlier than three to four weeks after overseeding with creeping bentgrass.

Do not apply PROGRASS to renovated or overseeded bentgrass fairway turf less than three-four weeks after seedling emergence.

Do not overseed with creeping bentgrass until three (3) to four (4) weeks after the last PROGRASS application.

**IV. TURF-TYPE TALL FESCUE**

Apply PROGRASS to turf-type tall fescue in the fall. If turf is overseeded with turf-type tall fescue, the initial PROGRASS application and the seeding may be simultaneous.

**WARM SEASON TURFGRASSES**

**I. ST. AUGUSTINE GRASS (ESTABLISHED TURF)**

Apply PROGRASS to St. Augustine grass in the spring and early summer to suppress Bermudagrass seedhead formation or control annual bluegrass. Best results are achieved if three applications are made. Make the initial application after Bermudagrass dormancy is broken. St. Augustine grass sod that has been recently harvested may show increased sensitivity to PROGRASS. Therefore, use the lower rate (1 gal/A) until the sod is established.

PROGRASS also suppresses the development of actively-growing Bermudagrass in established St. Augustine grass sod. Multiple, sequential applications are suggested for the longest suppression. Growth of Bermudagrass may resume after application is discontinued.

**II. OVERSEEDED BERMUDAGRASS**

Apply PROGRASS to overseeded bermudagrass in late-fall one to two weeks after emergence of overseeded perennial ryegrass to control annual bluegrass. Treatment to turf that is not fully dormant may cause early injury and/or delayed spring green-up. Applications of 0.67 to 0.75 gallons PROGRASS per acre have shown acceptable control of annual bluegrass with minimum injury to the non-dormant (or pre-dormant) bermudagrass when applied in late-November or early-December. Lower rates have shown lesser *Poa annua* control and higher rates have shown more bermudagrass injury when the bermudagrass is not fully dormant. The onset of dormancy will vary according to location and yearly

weather. One or two supplemental applications at 21 to 28 days intervals may be required to maintain control through the winter months. **Do not apply** more than two applications of PROGRASS when treating non-dormant bermudagrass. The final PROGRASS application should be made to bermudagrass no later than February 1st or 4 weeks prior to breaking of winter dormancy. Late applications (within 4 weeks of breaking dormancy) to turf that will be breaking dormancy may temporarily delay resumption of active growth (spring green-up) of bermudagrass in the spring. The breaking of winter dormancy will vary according to location and yearly weather. Application of PROGRASS to bermudagrass that is stressed due to shade, poorly drained soils, and high traffic may result in increased turf injury. Avoid use of PROGRASS or use lower rates under these conditions. Care should be taken to keep the PROGRASS in the overseeded areas during the applications (particularly when making applications to non-dormant bermudagrass) so that the ryegrass will mask any early injury or late transition in the spring. Higher seeding rates may also be helpful to minimize a thin stand appearance since annual bluegrass will be removed. Common bermudagrass in fairways or roughs may be more susceptible to herbicide injury than hybrid bermudagrass.



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## RECOMMENDED RATES AND TIMINGS<sup>1</sup>

Turf Type	Main Target Pests	Spray Start	# Apps	INT (Days)	Use Rate <sup>2</sup>		Overseeding Safety Interval <sup>3</sup> (Weeks After Emergence)
					Gal/Acre	Oz/ 1000 sq. Ft	
Ryegrass (Est. Turf)	Annual Bluegrass & Common Chickweed	Fall Spring <sup>4</sup>	2-3 1-2 <sup>5</sup>	21-28 —	$\frac{2}{3}$ -1 $\frac{1}{3}$	2-4	1-2
Ryegrass (New Seedlings) (Sandy Soils)	Annual Bluegrass & Common Chickweed	Fall	2-3	21-28	1	3	
Ryegrass (New Seedlings) (Silt or Clay Loam Soils)	Annual Bluegrass & Common Chickweed	Fall	2-3	21-28	1 $\frac{1}{3}$	4	
Kentucky Bluegrass	Annual Bluegrass	Fall	2-3	21-28	$\frac{1}{2}$	1 $\frac{1}{2}$	6
Creeping Bentgrass	Annual Bluegrass	Fall Spring <sup>4</sup>	2-3 1	21-28 —	$\frac{1}{2}$ $\frac{1}{2}$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$	3-4
Turf-Type Tall Fescue	Annual Bluegrass	Fall	2-3	21-28	$\frac{2}{3}$ -1 $\frac{1}{3}$	2-4	0
St. Augustinegrass (Est. Turf)	Bermudagrass Suppression & Seedhead Suppression	Spring	1-3	21-28	1-2	3-6	N/A
Overseeded (ryegrass) Bermudagrass:							
Dormant bermudagrass Common Chickweed	Annual Bluegrass,	Fall	2-3	21-28	$\frac{1}{2}$ -1 $\frac{1}{3}$	1 $\frac{1}{2}$ -4	N/A
Non- Dormant Bermudagrass	Annual Bluegrass, Common Chickweed	Fall	2	21-28	2/3-3/4	2-2 $\frac{1}{4}$	N/A

<sup>1</sup>Refer to label text for further instructions regarding each grass species

<sup>2</sup>Apply  $\frac{1}{2}$  to 2 gallons of PROGRASS in 20 to 60 gallons of water or 1 $\frac{1}{2}$  to 6 ounces of PROGRASS in 1 to 3 gallons of water

<sup>3</sup>Interval applies to overseeding specific grass on same type of grass after PROGRASS treatment

<sup>4</sup>Use Spring application after previous fall treatments only

<sup>5</sup>If overseeding in the spring with ryegrass, use 1-2 applications of PROGRASS