



432-941

12/27/2001

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

OFFICE OF
PREVENTION, PESTICIDES
AND
TOXIC SUBSTANCES

Mr. Richard M. Gorrell
Aventis Environmental Science USA, LP
95 Chestnut Ridge Road
Montvale, NJ 07645

DEC 27 2001

Dear Mr. Gorrell:

Subject: Label Revision Amendment - Revised First Aid
And Non Agricultural Use Requirement Section
Prograss Herbicide
EPA Registration No. 432-941
Your Amendment Application Submission Dated
August 29, 2001

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

1. Make the labeling change listed below before you release the product for shipment bearing the amended labeling:
 - a. Under the headings entitled "**FIRST AID**" within the subheading titled "IF SWALLOWED", please incorporate the following additional oral statement: "Do not give anything by mouth to an unconscious person."
2. Please submit (1) one final printed copy of the referenced label, incorporating the above change, before releasing the product for shipment.

A stamped copy is enclosed for your records. The amended labeling supercedes all previously accepted ones.

M. HOWARD
PM TEAM 23
(703) 305-6784

If you have any concerns or questions regarding this letter, please call Marcel Howard at (703)305-6784.

Sincerely yours,

Joanne I. Miller
Product Manger (23)
Herbicide Branch
Registration Division (7505C)

Enclosures



ACCEPTED
with COMMENTS
In EPA Letter Dated
DEC 27 2001

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as Amended, for the pesticide
registered under EPA Reg. No.
432-941

Prograss®

NOT FOR USE ON COMMERCIAL SOD FARMS IN ARIZONA
EMULSIFIABLE CONCENTRATE HERBICIDE
Selective Herbicide For Use By Professional Applicators On Ornamental
Turf Only

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.
**Contains petroleum distillates

EPA Reg. No. 432-941

EPA EST. NO.

KEEP OUT OF REACH OF CHILDREN

DANGER — PELIGRO

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.)

NET CONTENTS:



AVENTIS ENVIRONMENTAL SCIENCE USA LP
95 Chestnut Ridge Road • Montvale, NJ 07645

FIRST AID

- IF SWALLOWED:**
- ◆ Call a poison control center or doctor immediately for treatment advice.
 - ◆ Have person sip a glass of water if able to swallow.
 - ◆ Do not induce vomiting unless told to by a poison control center or doctor.
-
- IF IN EYES:**
- ◆ Hold eyes 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 ON SKIN:**
- ◆ Take off contaminated clothing.
 - ◆ Rinse skin immediately with plenty of water for 15-20 minutes.
 - ◆ Call a poison control center or doctor for treatment advice.

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

IN CASE OF MEDICAL, ENVIRONMENTAL, OR TRANSPORTATION EMERGENCIES OR INJURIES, CALL 1-800-334-7577 (24 HOURS/DAY).

For Product Information,
Call Toll Free: 1-800-331-2867.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

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

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.
- > Long-sleeve shirt & long pants
 - > Chemical-resistant gloves such as barrier laminate or Viton*
 - > Shoes plus socks
 - > 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.

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® Herbicide 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. Augustinegrass, 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 *Poa annua*
 - Large crabgrass *Digitaria sanguinalis*
 - Smooth crabgrass *Digitaria ischaemum*
 - Barnyardgrass *Echinochloa crus-galli*
 - Green foxtail *Setaria viridis*
 - Yellow foxtail *Setaria glauca*
 - Canarygrass *Phalaris canariensis*

- Annual Broadleaves**
- Burclover *Medicago sp.*
 - Common chickweed *Stellaria media*
 - Common purslane *Portulaca oleracea*
 - Redroot pigweed *Amaranthus retroflexus*

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> |
|------------------------|------------------|

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> |
| Large crabgrass | <i>Digitaria sanguinalis</i> |

USE PRECAUTIONS

- PROGRASS should be used only for recommended purposes and at the recommended rates (DO NOT OVERAPPLY).
- Avoid spray overlap or turf injury may occur.
- Use of a spray colorant or indicator in the spray tank is recommended so that spray pattern overlapping can be avoided.
- Do not apply 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.
- 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 to putting 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

NONAGRICULTURAL 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. Keep unprotected persons out of treated area until sprays have dried.

SPRAY EQUIPMENT, APPLICATION, AND PRECAUTIONS

Apply PROGRASS Herbicide using standard, low pressure (20 to 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 Herbicide; 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, Jolic, Liberty, Merit, Midnight, Monopoly, Mystic, Parade, Rugby, Sydsport, Touchdown.
DO NOT APPLY to the following cultivars: Northstar, Explorer, Limousine, RAN I and Total Eclipse.
- CREEPING BENTGRASS—Carmen, Cobra, Highland, Lopez, Mariner, National, Penncross, Providence, Putter, Southshore, SR1020, and Viper have shown good to excellent tolerance to PROGRASS Herbicide. Injury has been noted on Emerald, Penneagle, and Pennlinks occasionally. PROGRASS may

cause serious injury to Cohansey, Colonial, south German varieties, Egmont, Bardot, Tracenta, Allure, Astoria, and SR 7100.

- ▶ TURF-TYPE TALL FESCUE—America, Arid, Mustang
- ▶ ST. AUGUSTINEGRASS—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 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. Spring applications are most effective following fall applications.

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 is recommended in fall and/or spring during the primary period of annual bluegrass germination, and up to 30 days after annual bluegrass emergence. Annual bluegrass is easiest to control when young and newly emerged. Spring applications should be used in conjunction with fall applications. Consult Extension Service or University weed specialists for date(s) annual bluegrass germinates in your area.

When overseeding with perennial ryegrass, apply PROGRASS Herbicide 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 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 Herbicide to bluegrass not less than 8 weeks after emergence. Bluegrass overseeded with ryegrass may be treated one to two weeks after ryegrass emergence.

Do not reseed with Kentucky bluegrass until 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 reseeding until the spring. Kentucky bluegrass sod quality during the spring may be reduced following fall applications of PROGRASS.

III. Creeping Bentgrass

PROGRASS Herbicide may be applied safely to bentgrass cut at fairway height. PROGRASS use should be avoided in poorly drained and/or heavily shaded turf areas which are more prone to herbicide injury. Tank mixing with soluble or controlled release nitrogen at (.1 to .25 lb N per 11000 ft²) 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. Apply PROGRASS in the spring after creeping bentgrass has resumed active growth and has achieved full green-up.

Do not apply PROGRASS to renovated or overseeded bentgrass fairway turf less than three (3) to four (4) 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 Herbicide to turf-type tall fescue in the fall. If overseeding with turf-type tall fescue, PROGRASS application and the seeding may be simultaneous.

WARM SEASON TURFGRASSES

I. St. Augustinegrass (Established Turf)

Apply PROGRASS Herbicide to St. Augustinegrass in the spring and early summer to suppress bermudagrass and Bermuda-grass seedhead formation or control annual bluegrass. Best results are achieved when multiple applications are made.

PROGRASS suppresses the development of actively growing Bermudagrass in established St. Augustine Sod. Begin PROGRASS applications when Bermudagrass first breaks dormancy in the spring. Application timing is critical to achieve optimum results and will vary depending on location and temperature. A second application of PROGRASS should be made 21-28 days after the first application. For optimum suppression, a third application may be necessary 21-28 days after the second application. Temporary stunting and minor discoloration of St. Augustinegrass may occur after application. To improve suppression, PROGRASS may be tank-mixed with Atrazine in each application (Atrazine at up to 2 lb ai/A for first application and 0.75 lb - 1 lb ai/A atrazine for second or third application). DO NOT treat St. Augustinegrass that has not been established for six months. DO NOT treat St. Augustinegrass that is under stress or injury may occur. If the St. Augustinegrass shows signs of severe yellowing or stunting, discontinue applications.

II. Overseeded Dormant Bermudagrass

Apply PROGRASS Herbicide 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 of PROGRASS per acre have shown acceptable control of annual bluegrass with minimum injury to nondormant (or predormant) bermudagrass when applied in late November or early December. Lower rates have shown lesser annual bluegrass control and higher rate 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 day intervals may be required to maintain control through the winter months. DO NOT APPLY more than two applications of PROGRASS when treating nondormant 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 Herbicide 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 nondormant bermudagrass) so that the ryegrass will mask any early injury or late transition in the spring. Higher seeding rate 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.

RECOMMENDED RATES AND TIMINGS¹

| Turf Type | Main Target Pests | Start | # Apps | Application INT (Days) | Use Rate ² | | Overseeding Safety Interval ³ (Weeks After Treatment) | Application Safety Interval ⁵ (Weeks After Emergence) |
|-------------------------------------|--------------------------|-----------------------------|----------------|------------------------|-----------------------|------------------|--|--|
| | | | | | Gal/Acre | Oz/ 1000 Sq. Ft. | | |
| Ryegrass | Annual Bluegrass | Fall Spring ⁴ | 2 - 3 1 - 2 | 21 - 28 21 - 28 | ¾-1½ | 2-4 | 1-2 | 1-2 |
| Kentucky Bluegrass | Annual Bluegrass | Fall | 2 - 3 | 21 - 28 | ½ | 1½ | 6 | 8 |
| Creeping Bentgrass | Annual Bluegrass | Fall Spring ⁴ | 2 - 3 1 - 2 | 21 - 28 21 - 28 | ½ ½ | 1½ 1½ | 4 | 4 |
| Turf-Type Tall Fescue | Annual Bluegrass | Fall | 2 - 3 | 21 - 28 | ½-1 | 2-4 | 0 | 2-3 |
| St. Augustinegrass (Est. Turf) | Bermudagrass Suppression | Spring | 2 - 3 | 21 - 28 | 1-2 | 3-6 | NA | NA |
| Overseeded (ryegrass) Bermudagrass: | | | | | | | | |
| Dormant Bermudagrass | Annual Bluegrass | Fall | 2 - 3 | 21 - 28 | ½-1½ | 1½-4 | NA | NA |
| Nondormant Bermudagrass | Annual Bluegrass | Fall | 2 | 21 - 28 | ¾-¾ | 2-2¼ | NA | NA |

¹Refer to label text for further instructions regarding each grass species.
²Apply recommended rate of PROGRASS in 20 to 60 gallons of water per acre or 1 to 3 gallons of water per 1000 Ft².
³Interval applies to overseeding specific grass on same type of grass after last PROGRASS treatment.
⁴Use spring application after previous fall treatments only.
⁵Refers to interval in which PROGRASS may be safely applied to specific grass following seed emergence.
 NA - Not applicable.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, because of manner of use and other factors beyond Aventis Environmental Science's control, it is impossible for Aventis Environmental Science to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

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TRADEMARK INFORMATION

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Replaces PEC-SL-5M-(N981211)-Rev. 7/01

Revisions:

- 1) First Aid
- 2) Ornaments added
- 3) Addition of Bermuda Suppression in St. Augustine Sod