


Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 11-30-93

|   |  |  |                                     |
|---|--|--|-------------------------------------|
| <b>(A)</b><br> | United States Environmental Protection Agency<br>Office of Pesticide Programs (H7505C)<br>Washington, DC 20460 | <input type="checkbox"/> Registration<br><input type="checkbox"/> Amendment<br><input checked="" type="checkbox"/> Other | OPP Identifier Number<br><br>192065 |
|   | Application for Pesticide:   |  |                                     |

**Section I**

|   |  |   |
|---|--|---|
| 1. Company/Product Number<br>2217-763   | 2. EPA Product Manager<br>Robert Taylor  | 3. Proposed Classification<br><input type="checkbox"/> None <input type="checkbox"/> Restricted |
| 4. Company/Product (Name)<br>Embark® 1-S Plant Growth Regulator   | PM#<br>(PM 25)   |   |
| 5. Name and Address of Applicant (Include ZIP Code)<br>PBI/Gordon Corporation<br>PO Box 4090<br>1217 West 12th Street<br>Kansas City, MO 64101<br><input type="checkbox"/> Check if this is a new address | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:<br><br>EPA Reg. No. _____<br>Product Name _____ |   |

**Section II**

|  |  |
|--|--|
| <input type="checkbox"/> Amendment - Explain below                             | <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ |
| <input type="checkbox"/> Resubmission in response to Agency letter dated _____ | <input type="checkbox"/> "Me Too" Application.   |
| <input checked="" type="checkbox"/> Notification - Explain below.              | <input type="checkbox"/> Other - explain below.  |

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

**NOTIFICATION:**

Revision of the wetlands warning statement within the Environmental Hazards section according to definition stated in Pesticide Regulation (PR) Notice 93-3, "Labeling Statement Prohibiting Application to Water", March 9, 1993. This is to certify that this notification meets every requirement of PR-Notice 88-6. Three copies of the revised labeling are enclosed.

**NOTIFICATION LABEL NOT REVIEWED PER PR NOTICE 88-6**

DATE: 7/12/93

**Section III**

|   |   |  |  |   |                   |
|---|---|--|--|---|-------------------|
| 1. Material This Product Will Be Packaged In:   |   |  |  | 2. Type of Container  |                   |
| Child-Resistant Packaging<br><input type="checkbox"/> Yes*<br><input type="checkbox"/> No   | Unit Packaging<br><input type="checkbox"/> Yes<br><input type="checkbox"/> No | Water Soluble Packaging<br><input type="checkbox"/> Yes<br><input type="checkbox"/> No | <input type="checkbox"/> Metal<br><input type="checkbox"/> Plastic<br><input type="checkbox"/> Glass<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Other (Specify) _____ |   |                   |
| * Certification must be submitted.  |   | If "Yes," Unit Package wgt.  | No. per container  | If "Yes," Package wgt.  | No. per container |
| 3. Location of Net Contents Information<br><input type="checkbox"/> Label <input type="checkbox"/> Container  |   | 4. Size(s) of Retail Container   |  | 5. Location of Label Directions<br><input type="checkbox"/> On Label<br><input type="checkbox"/> On Labeling accompanying product |                   |
| 6. Manner In Which Label Is Affixed To Product<br><input type="checkbox"/> Lithograph<br><input type="checkbox"/> Paper glued<br><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<br>James A. Armbruster, Ph.D. | Title<br>Mgr. Regulatory Services | Telephone No. (Include Area Code)<br>(816)421-4070 |
|------------------------------------|-----------------------------------|--|

**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, both under applicable law.

**BEST AVAILABLE COPY**

|   |                                      |  |
|---|--------------------------------------|--|
| 2. Signature<br> | 3. Title<br>Mgr. Regulatory Services | 6. Date Application Received (Stamped)<br><br>.....<br>..... |
| 4. Typed Name<br>James A. Armbruster, Ph.D.   | 5. Date<br>May 20, 1993              |  |

# EMBARK® 1-S PLANT GROWTH REGULATOR

**ACTIVE INGREDIENT:**

\*\*Diethanolamine salt of mefluidide\*(N-[2,4-dimethyl-5-[[trifluoromethyl)-sulfonyl]amino]phenyl]acetamide) . . . . . 15.0%

**INERT INGREDIENTS** . . . . . 85.0%

**TOTAL** 100.00%

\*U.S. Patent Nos. 3,639,474; 3,894,078; 4,013,444.

\*\*Equivalent to 1.0 lbs. (11% by weight) (N-[2,4-dimethyl-5-[[trifluoromethyl)-sulfonyl]amino]phenyl]acetamide) per gallon.

EMBARK® is a registered trademark of PBI/GORDON CORPORATION for Mefluidide.

**NOTIFICATION  
LABEL NOT REVIEWED  
PER PR NOTICE 89-6**  
DATE. 7/12/83

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**NET CONTENTS ONE GALLON**

AP 052093  
EPA REG. NO. 2217-763  
EPA EST. NO. 2217-XX-XX

Mfd. BY PBI/GORDON CORPORATION  
KANSAS CITY, MISSOURI 64101



**STOP! READ THE ENTIRE LABEL BEFORE USING OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY**

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals**

**CAUTION:** Harmful if swallowed or absorbed through the skin. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wear protective clothing; including rubber gloves when handling. In case of contact immediately flush eyes or skin with plenty of water for 15 minutes. Get medical attention if irritation persists. If swallowed, drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger or blunt object. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

**ENVIRONMENTAL HAZARDS**

Keep out of lakes, ponds, or streams. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not allow spray to drift onto nontarget crops or vegetation.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

**STORAGE AND DISPOSAL**

**STORAGE AND DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal. Store product in original container in locked storage area, inaccessible to children and pets.

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

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**GENERAL INFORMATION:** EMBARK 1-S Plant Growth Regulator (PGR) is recommended for use in public, commercial, and industrial areas for regulating the growth of various species of turf grasses and broadleaf vegetation. EMBARK 1-S PGR reduces mowing requirements for up to 8 weeks following treatment by regulating growth and suppressing seedhead formation.

**SPRAY EQUIPMENT:** EMBARK 1-S PGR may be applied to localized areas with small spray units, such as backpack sprayers, or to larger areas with conventional spray equipment. To be assured of proper dosage and uniform spray coverage it is essential that spray equipment is properly calibrated. When calibrating with small spray equipment, a trial application is recommended over a small measured turf area. Do not apply this product through any type of irrigation system.

**MIXING:** Pour the required amount of EMBARK 1-S PGR into the spray tank containing approximately 1/2 the required amount of water. Fill the tank as required with water and spray as recommended. Minimal agitation in the spray tank is necessary since the 1-S formulation is soluble in water.

**RINSING:** Rinse EMBARK 1-S PGR container with water and pour the rinse solution into the spray tank prior to spraying. Do not use spray equipment for other purposes until thoroughly cleaned. Flush spray equipment with plenty of water immediately after use to avoid contamination of later sprays.

**RECOMMENDED APPLICATION**

Apply EMBARK 1-S PGR uniformly to green, actively growing turf. At the time of treatment, turf should be at the height which is desired to be maintained during the period of growth regulation. For season long seedhead suppression of cool season grasses apply no later than when the seedhead can be felt at the base of the stem. (Approximately 2 weeks prior to seedhead appearance.) Do not apply to closely mowed areas where most of the green growth has been cut. Turf may be mowed up to 1 day before or 3 to 7 days after application. Remove all grass clippings and leaves prior to treatment. Avoid spray overlaps that will increase dosage above those recommended. EMBARK 1-S PGR may be applied twice per season on Kentucky bluegrass, fescues, and Bermudagrass; however, an interval of at least 6 weeks should occur before the second application. Use the higher rate of application where the greatest growth regulation and seedhead suppression are desired.

**RECOMMENDED USE AREAS:** EMBARK 1-S PGR applied uniformly as a broadcast spray to turf will reduce mowing requirements for up to 8 weeks in the following commercial and public areas:

Commercial-Industrial: Highway Rights-of-way, Utility Rights-of-way, Buildings, Industrial Parks, Tank Farms, Airports.

Public: Schools, Libraries, Hospitals, Cemeteries, Golf Courses, Parks, Roads and Walkways.

**Tank Mixing with 2,4-D or Mecoprop (MCP):** EMBARK 1-S PGR may be tank mixed with up to 2.0 lbs. active ingredient per acre of 2,4-D in low volatility ester and amine salt formulations of MCP in amine salt formulations. Follow the instructions and precautionary statements on the 2,4-D and MCP product labels.

**APPLICATION RATE TABLE:**

| Amount of EMBARK 1-S PGR   |                                |                                      |
|--|--------------------------------|--------------------------------------|
| USE ON:  | per acre<br>in 15-50 gal water | per 1000 sq ft<br>in 3-10 gals water |
| <b>TURFGRASSES:</b>  |                                |                                      |
| Kentucky Bluegrass<br>Tall, Red, and Chewings<br>Fescues<br>Perennial Ryegrass<br>Timothy<br>Teed Canarygrass<br>Quackgrass<br>Centipedegrass<br>Kikuyugrass | 2-4 pints                      | 8-16 fl.oz.                          |
| Crested Wheatgrass<br>Orchardgrass<br>Smooth Brome   | 3-4 pints                      | 12-16 fl.oz.                         |
| St. Augustinegrass   | 2 pints                        | 8 fl.oz.                             |
| Common Bermudagrass  | 8 pints                        | 32 fl.oz.                            |

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**CALIFORNIA NATIVE GRASSES AND BROADLEAF VEGETATION:**  
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**Grasses:**

Wild Barley, Red Brome,  
Rippgut Brome, Wild Oats

**Broadleaves:**

4-8 pints

16-32 fl.oz.

Ice Plant, Algerian Ivy,  
Cheeseweed, Sour Clover,  
Fiddleneck, Redstem Filaree,  
Black Mustard

**NOTE:** In comparison with untreated, actively growing turf areas, treated turf which is being maintained in height by EMBARK 1-S PGR may appear less dense and temporarily discolored following application. However, with increasing time, turf may appear darker green than untreated areas.

**Limitations:**

EMBARK 1-S PGR should not be applied to golf greens. Do not apply EMBARK PGR to turf areas within 4 growing months after seeding and do not reseed within 2 weeks following application. Do not allow animals to graze on treated areas. Optimum results may not be obtained if rainfall or overhead irrigation occurs within 8 hours following application.

**LIMITED WARRANTY AND DISCLAIMER.**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.