

52287-11

07/24/2009

1/10



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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Mr. Robert F. Bischoff  
Product Registration  
TotalTurf Consulting LLC  
Agent for Harrell's LLC  
26 A.A. Cooper Road  
Megs, GA 31765

JUL 24 2009

SUBJECT: Application for Pesticide Notification (PRN 98-10)  
Request Alternate Brand Name "Fertilizer W/Starateem #2%"  
EPA Reg. No. 52287-11  
Application Dated June 17, 2009

Dear Registrant:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 06/17/09 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703-305-6249 or Owen F. Beeder of my staff at 703-308-8899.

Sincerely,

A handwritten signature in black ink, appearing to be "Linda Arrington", is written below the word "Sincerely,".

Linda Arrington  
Notifications & Minor Formulations Team Leader  
Registration Division (7505P)  
Office of Pesticide Programs



United States  
Environmental Protection Agency  
Washington, DC 20460

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

**Application for Pesticide - Section I**

1. Company/Product Number 52287-11	2. EPA Product Manager Joanne I. Miller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Fertilizer with Starteem #2	PM# 23	
5. Name and Address of Applicant (Include ZIP Code) Harrell's LLC P. O. Box 807 Lakeland, FL 33802 <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: EPA Reg. No. N/A Product Name N/A <b>NOTIFICATION</b> JUL 24 2009	

**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 of Alternate Brand Name per PR Notice 98-10 (IIA). 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.

**Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Metal	
* Certification must be submitted				<input checked="" type="checkbox"/> Plastic	
				<input checked="" type="checkbox"/> Glass	
				<input checked="" type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 50 lbs		5. Location of Label Directions <input checked="" type="checkbox"/> On Affixed Label	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Paper glued <input checked="" 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 Robert F. Bischoff	Title Agent, TotalTurf Consulting LLC	Telephone No. (Include Area Code) (317) 873-0222
<b>Certification</b> 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 Agent, TotalTurf Consulting LLC	
4. Typed Name Robert F. Bischoff	5. Date June 17, 2009	

**TotalTurf Consulting LLC**  
**26 A. A. Cooper Rd.**  
**Meigs, GA 31765**

**Direct: 843-384-2807**  
**Fax: 229-683-3426**

**E-Mail: rbcooper@juno.com**

June 17, 2009

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7505P)  
U. S. Environmental Protection Agency  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202-4501

Attn: Joanne I. Miller

Subject: Fertilizer with Starteem #2  
EPA Reg. No. 52287-11  
Notification of Alternate Brand Name

Dear Ms. Miller:

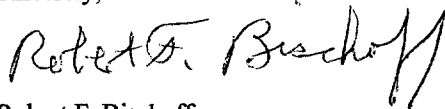
Enclosed labeling shows the addition of an alternate brand name (Fertilizer W/Starteem #2) for the subject registered product. This notification is being submitted on behalf of Harrell's LLC, P. O. Box 807, Lakeland, FL 33802 by TotalTurf Consulting LLC, an authorized agent for Harrell's LLC.

The following documents are included in the subject submission:

- Cover Letter
- Application for Pesticide (EPA Form No. 8570-1)
- One Copy of Labeling Showing the Alternate Brand Name [Coded as 20090617.Final Label]
- One Copy of Current Labeling [Coded as 20090303.Final Label]

If there are any questions or additional information is needed concerning this submission, do not hesitate to contact me at (317) 873-0222 or Raymond B. Cooper at (843) 384-2807.

Sincerely,



Robert F. Bischoff  
Agent  
TotalTurf Consulting LLC  
26 A. A. Cooper Road  
Meigs, GA 31765

# FERTILIZER W/STARTEEM® # 2

4/10  
NOTIFICATIONA PRE-EMERGENCE HERBICIDE FOR USE ON GOLF COURSES, SOD FARMS, PARKS, ATHLETIC FIELDS, FEDERAL, MUNICIPAL, CORPORATE LAWNS  
JUL 24 2009

50 lb. Bag Treats up to 10,870 Sq. Ft.

FOR SALE TO AND USE BY PROFESSIONAL APPLICATORS ONLY. NOT FOR USE BY HOMEOWNERS/CONSUMERS. FOR USE BY OR ON GOLF COURSES, SOD FARMS, COMMERCIAL NURSERIES, TURF MANAGEMENT FIRMS, MUNICIPAL, FEDERAL, AND CORPORATE PARK, LANDSCAPE, AND GROUNDS MAINTENANCE PERSONNEL.

STARTEEM® is a pre-emergent weed control product plus a quality fertilizer for use on varieties of Perennial Bluegrass, Bentgrass, Bermudagrass, Buffalograss, Perennial Ryegrass, St. Augustinegrass, Seashore Paspalum, Tall Fescue and Zoysiagrass.

Also for use around Ornamental Shrubs, Vines, Trees, & Ground Covers

**ACTIVE INGREDIENTS:**

Oxadiazon [CAS No.19666-30-9].....	0.75%
Benfluralin [CAS No.1861-40-1].....	0.25%
Trifluralin [CAS No.1582-09-8].....	0.25%
OTHER INGREDIENTS: .....	98.75%
Total	100.00%

EPA Reg. No. 52287-11

EPA Est. No. 52287-FL-1

**GUARANTEED FERTILIZER ANALYSIS**

Total Nitrogen (N).....	XX%
Ammoniacal Nitrogen.....	XX%
Urea Nitrogen.....	XX%
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> ).....	XX%
Soluble Potash (K <sub>2</sub> O).....	XX%

Derived from Ammonium Phosphate, Urea, and  
Muriate of Potash

**KEEP OUT OF REACH OF CHILDREN****CAUTION**

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

**FIRST AID**

**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 eye. Call a poison control center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** 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.

**IF INHALED:** Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:** Call 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time (NPIC Web Site: [npic.orst.edu](http://npic.orst.edu)).

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

**PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing.

NOTIFICATION

JUL 24 2009

5/10

# FERTILIZER W/STARTEEM® # 2

A PRE-EMERGENCE HERBICIDE FOR USE ON GOLF COURSES, SOD FARMS, PARKS, ATHLETIC FIELDS, FEDERAL, MUNICIPAL, CORPORATE LAWNS

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Loaders, applicators, and other handlers must wear: long-sleeved shirt and long pants, shoes and socks, and chemical resistant gloves made of waterproof materials. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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 pesticide is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oysters. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not apply when weather conditions favor drift from areas treated. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning equipment or disposal of equipment wash waters or rinsate.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State of Tribe, consult the agency responsible for pesticide regulation. Do not apply through any type of irrigation system. Do not store or use in or around the home or home garden. Apply only as specified on this label.

### 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, and nurseries, 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), notification to workers, and restricted-entry intervals. 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. 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, wear coveralls over long-sleeved shirt and long pants, socks, shoes, and chemical resistant gloves made of any waterproof material.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements of 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 only on farms, forests, nurseries or greenhouses. Do not enter or allow other people (or pets) to enter the treated area until dusts have settled. If watering-in is required after the application – except for those people involved in the watering-in – do not enter or allow other people (or pets) to enter the treated areas until the watering-in is complete and the surface is dry.

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store product in its original bag, in a cool dry locked place out of reach of children. In case of spill, sweep up and use according to directions or dispose of as follows. **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:** Nonrefillable container. Do not reuse or refill this container, offer for recycling if available. Completely empty bag into application equipment. Then 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.

Harrell's now offers the Golf Course Superintendent and Grounds Maintenance Managers the "tested" "STARTEEM-SPLIT". A pre-emergence weed control program that gets maximum benefit from commonly used pre-emergence crabgrass control products!

Controls Crabgrass, Goosegrass, Poa Annus, Annual Sedge and other weeds as listed; On Golf Courses, Commercial Lawns, and other Athletic and/or Recreational, Ornamental Turf. If you are serious about getting rid of annual grassy and certain broadleaf weeds before they go to seed. Here's how to do it. Use STARTEEM # 1 and then STARTEEM # 2 OR for hard-to-kill weeds follow # 1 with STARTEEM # 3.

### HOW MUCH TO USE AND WHEN TO APPLY THEM:

STARTEEM # 1 is to be used as the first application; STARTEEM # 2 (a different formula), is to be used as the second application of a seasonal (Split-application program) both products to be used at a rate of 200 lbs./acre (equal to 4.6 lbs. /1000 sq. ft.) STARTEEM may be applied to "established" perennial Bluegrass, Bentgrass, (see restrictions), Bermudagrass, Buffalograss, Perennial Ryegrass, St. Augustinegrass, Seashore aspalum, Tall Fescue and Zoysiagrass turf, at condominium complexes, corporate and public parks, golf courses, sod farms, athletic fields,

# FERTILIZER W/STARTEEM® # 2

A PRE-EMERGENCE HERBICIDE FOR USE ON GOLF COURSES, SOD FARMS, PARKS, ATHLETIC FIELDS, FEDERAL, MUNICIPAL, CORPORATE LAWNS

playgrounds, and other ornamental and recreational turfgrass areas. Not for use on home lawns. The turf should be free of leaves and thatch and in condition to allow granules to reach the soil surface. Know the square footage of the area to be treated and uniformly apply using a

granule spreader. Do not apply to turf when it is wet. When using, do not overlap spreader applications, especially on St. Augustinegrass since discoloration "streaking" may temporarily occur from the "doubled rate". Observe the maximum rate of St. Augustinegrass and Bentgrass of one application of each STARTEEM # 1 AND STARTEEM # 2 or # 3 per 1,000 sq. ft. per year) See below for restrictions when using on Bentgrass. After applications if rain in not expected within 24 hours sprinkler irrigate the treated turf with up to a ¼ inch of water to get maximum weed control and quicker response from the fertilizer nutrients. STARTEEM #1 and #2 must be applied prior to weed seed germination (see map of U.S.). It will not control growing weeds.

Pre-emergence Weed Control with the "STARTEEM® SPLIT"			
Weeds Controlled	FIRST APPLICATION STARTEEM #1 *Apply 200 lbs. product per acre equal to 4.6# / 1,000 sq. ft.	SECOND APPLICATION STARTEEM #2 or #3 Apply 200 lbs. per acre equal to 4.6# / 1000 sq. ft.	Directions
Crabgrass (Digitaria, spp.) Goosegrass (Bleusine indica) Field Sandbur (Canchusincertus) Annual Sedge (Cyperuscompressus) Annual Bluegrass (Poa annua spp.) (See Note below)			*Apply 60 to 90 days apart in late winter or early spring prior to weed seed germination. See map for proper timing. Application made after April or May may not be fully effective.  Apply in late summer to early fall prior to weed seed germination.
Virginia Buttonweed (Diodia virginiana) Pigweed (Amaranthus spp) Florida Pusley (Richards scabra) Oxalis (Oxalis spp) Stingling Nettle (Urtica dolca) Carpetgrass (Axonagus affinis)	Apply 200 lbs product per acre equal to 4.6# / 1,000 sq. ft.	Apply 200 lbs per acre equal to 4/6# / 1,000 sq. ft.	Apply in early spring prior to weed seed germination.
Fall Application for Spring Weed Control in Cool Season Turf			
Crabgrass, Goosegrass and other annual weeds as listed	Apply 200 lbs per acre equal to 4.6# / 1,000 sq. ft.	Apply 200 lbs. per acre equal to 4.6# / 1,000 sq. ft.	For use in Bluegrass, Bentgrass, perennial Ryegrass and Tall Fescue. Make application in the fall after turf has become dormant. For late fall applications, seeding into treated areas should be delayed until 4 months after green up.
Annual Bluegrass Control in Bermudagrass Fairways Over seeded with Perennial Ryegrass only			
Annual Bluegrass (Poa Annua spp)	200 lbs. / A	4.6# / 1,000 sq. ft.	Apply in late summer to early fall prior to Poa Annua spp. seed germination. Any Poa Annua spp. established when this product is applied will not be controlled. It should not be applied closer than 60 days to over seeding. Do not use when Poa trivialis is present in the overseed mixture. Apply the full 200 lb. Rate per acre in one application.
<p><b>NOTE:</b> In many areas annual bluegrass exists in at least two biotypes or subspecies of Poa Annua. The true <u>annual</u> biotype, "POA Annua spp annua" which germinates from seed every year <u>is controlled</u> while the biotype, "Poa Annua spp. raptans" which behaves like a <u>perennial</u> and survives through the summer as an established plant, <u>cannot be controlled</u>. Consult the Extension service or University weed specialist in your area for more information concerning your locale.</p>			
Annual Weed Control during establishment from Sprigs of Bermudagrass, Zoysiagrass and Seashore Paspalum			
Crabgrass and Goosegrass, Annual Sedge and other annual weeds.	200 lbs. / per acre	200 lbs. / per acre	
For Bermudagrass make application immediately prior to or immediately after sprigging. For Seashore Paspalum make application 10 to 14 days after sprigging. Applications made close to the time of sprigging may cause objectionable Seashore Paspalum injury. Disturbance of the soil surface after application may disrupt the herbicide barrier and reduce effectiveness. For best results sprinkle irrigate the "sprigged" area with up to ¼ inch water after application.			

## GENERAL PRECAUTIONS AND RESTRICTIONS

A single application rate must not exceed 200 lbs of product per acre which is equivalent to 4.6 lbs of product per 1,000 sq. ft. and 1.5 lb of oxadiazon active ingredient per acre and 0.5 lb of benfluralin active ingredient per acre. The maximum application rate for all Starteem treatments is 3.5 lbs of oxadiazon active ingredient per acre per year and 1.25 lbs of benfluralin active ingredient per acre per year. Do not apply more than two (2) applications per year. Applications to plants that will bear fruits, berries, or nuts within 12 months are not allowed. Aerial application is prohibited. Not for use on home lawns, in field grown ornamental nurseries, on ornamental bulbs, or in Christmas tree plantations. Do not apply this product in a way that will contact workers or other persons (or pets), either directly or through drift. Only protected handlers may be in the area during application. This product must be watered in as soon as possible after application. Watering-in must be performed by the commercial applicator or the commercial applicator must provide the following instructions to the owner in writing: This product must be watered in as soon as possible. Do not enter or allow others (including children or pets) to enter the treated areas (except those involved in the watering) until the watering-in is complete and the surface is dry.

# FERTILIZER W/STARTEEM® # 2

A PRE-EMERGENCE HERBICIDE FOR USE ON GOLF COURSES, SOD FARMS, PARKS, ATHLETIC FIELDS, FEDERAL, MUNICIPAL, CORPORATE LAWNS

**PRECAUTIONS IN USING:** For St. Augustine grass and Bentgrass turf DO NOT exceed the rate of one application of each STARTEEM® #1 and STARTEEM® #2 per 1,000 sq. ft. / year. DO NOT apply to Bentgrass turf mowed less than 3/8 inches. This product may cause discoloration of Bentgrass, Bermudagrass and St. Augustine grass but this discoloration is temporary and normally outgrown within 2 to 3 weeks. Avoid contact with flowers and shrubs except as recommended elsewhere for ornamental plants on this label. DO NOT apply to newly seeded areas. Seeding into treated areas should be delayed until 4 months after treatment except as noted above. DO NOT apply to Dichondra or Centipedegrass. DO NOT use on golf course putting greens or tees because of the varying cultural practices used.

## FOR SPRING APPLICATION ON GOLF COURSES UNDER TURF MANAGEMENT

### Use the STARTEEM-SPLIT application!

Weed control and better turf management can be programmed by using the "STARTEEM-SPLIT" weed control program. Starting 40 to 60 days before expected weed seed germination, apply STARTEEM® #1 at a rate of 200 lbs. per acre and follow within 60 days with an application of STARTEEM® #2 at the 200 lb. per acre rate. This program supplies 2.5 lbs. of Oxadiazon per acre, per year and 2.5 lbs. of the combination of the Benefin and Trifluralin per acre, per year.

If "Hard-To-Kill" weeds (as listed below) with the asterisk (\*) are known to be prevalent in the turfgrass area use STARTEEM® #3 as the second application after STARTEEM® #1 applied at 200 lbs. per acre (equal to the 4.6 lbs per 1,000 sq ft)

#### Controls Annual Broadleaf Weeds and Annual Grasses

Annual Bluegrass	*Evening Primrose	**Jungle Ricegrass	Sow thistle
Annual Sedge	Fireweed	Lambsquarter	Speedwell
*Barnyardgrass	Field Sandbur	**Liverwort	Spotted Catsear
Bittercress	Foxtail; Green, Bristly	Oxalis	Spurge; Garden, Petty,
Carpetweed	Fall Panicum	**Panama Paspalum	**Prostrate
Carpetgrass	Florida Pusley	Pennsylvania Smartweed	Stinging Nettle
Common Groundsel	*Galinsoga	Redroot Pigweed	*Swinecress
Common Purslane	Golden Ragwort	Sensitive Plant	Virginia Buttonweed
Crabgrass	*Goosegrass	Shepardspurge	Yellow Woodsorrel

\*Use the STARTEEM® #1 and STARTEEM® #2 SPLIT application for control of these weeds listed above not bearing the asterisk (\*). For hard-To-Kill weeds use STARTEEM® #3 as second application.

NOTE: For newly seeded lawns do not apply this product until after the second or third cutting. For best turf management, place new grass seed in the fall of the year. Spring pre-emergence weed control can then be applied.

#### SPREADER SETTINGS

Spreader Settings for	STARTEEM® #1	STARTEEM® #2	STARTEEM® #3
Cyclone B3-Pro	#x.x	#x.x	#x.x
For Scotts Pro R-8A	#x.x	#x.x	#x.x

All STARTEEM products #1; #2; and #3 apply at 200 lbs / Acre = to 4.6# / 1,000 sq. ft.

Plan on an approximately 3 mph spreader speed to obtain best coverage. Know the exact square footage of your area before application. Incorrect application can result in turf damage or poor weed control.

FOR SPRING APPLICATION TO UNIVERSITY, FEDERAL, CORPORATE, MUNICIPAL LAWNS, CEMETERIES, PARKS, ATHLETIC FIELDS, SOD FARMS, CONDOMINIUMS UNDER MANAGEMENT. FOR PRE-EMERGENCE WEED CONTROL, use a STARTEEM®-SPLIT PROGRAM!

STARTEEM® may be applied to "established" varieties of perennial Bluegrass, Bentgrass (see restrictions), Bermudagrass, Buffalograss, Perennial Ryegrass, St. Augustinegrass, Seashore Paspalum, Tall Fescue, and Zoysiagrass. Weed control and better turf management can be programmed by using the "STARTEEM-SPLIT" weed control program. Starting 40 to 60 days before expected weed seed germination, apply STARTEEM® #1 at a rate of 4.6 lbs per 1,000 sq. ft. and follow with a second application using STARTEEM® #2 at the same rate within 60 days of the first application. This program supplies 2.5 lbs of Oxadiazon per acre, per year and 2.5 lbs of the combination of the Benfluralin and Trifluralin per acre, per year.

If "Hard-To-Kill" weeds, as listed below with the asterisk (\*) are known to be prevalent in the area, use STARTEEM® #3 as the second application after STARTEEM® #1 applied at 200 lbs per acre (equal to the 4.6 lbs per 1,000 sq. ft.)

#### WHEN TO APPLY AFTER OVERSEEDING TURF

Do not apply to over-seeded turf within 60 days after seeding or until after the second mowing, whichever is longer. Injury to desirable seedlings is likely if this product is applied before seedling secondary roots are in the second inch of soil, not thatch plus soil.

#### WHEN TO OVERSEED AFTER APPLICATION

This product will inhibit the germination of turf species if overseeded too soon after application. Delay overseeding or reseeding 60 to 90 days.

# FERTILIZER W/STARTEEM® # 2

A PRE-EMERGENCE HERBICIDE FOR USE ON GOLF COURSES, SOD FARMS, PARKS, ATHLETIC FIELDS, FEDERAL, MUNICIPAL, CORPORATE LAWNS

## Controls Annual Broadleaf Weeds and Annual Grasses

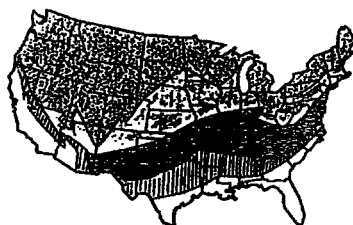
Annual Bluegrass  
Annual Sedge  
\*Barnyardgrass  
Bittercress  
Carpetweed  
Carpetgrass  
Common Groundsel  
Common Purslane  
Crabgrass  
\*Evening Primrose  
Fireweed  
Field Sandbur

Fall Panicum  
Florida Pusley  
\*Galinsoga  
Golden Ragwort  
\*Goosegrass  
\*\*Jungle Ricegrass  
Lambsquarter  
\*\*Liverwort  
Oxalis  
\*\*Panama Paspalum  
Pennsylvania Smartweed

Redroot Pigweed  
Sensitive plant  
Shepardspurse  
Sow thistle  
Speedwell  
Spotted Catsear  
Spurge, Garden, Petty,  
\*\*Prostrate  
Stinging Nettle  
\*Swinecress  
Virginia Buttonweed  
Yellow Woodsorrel

Use STARTEEM #1 then STARTEEM #2 as a SPLIT application for control of these weeds. For "hard-to-kill" weeds with asterisk, use STARTEEM #3 as the Second Application.

## Approximate Crabgrass Seed Germination Dates In the U.S.A.



**Approximate Date**

- After May 30
- After May 10
- After April 20
- After March 20
- January 1 to March 20

**NOTICE:** Buyer and user assume all risk and liability of use, storage and/or handling of this product not in accordance with the terms of this label.

**Net Weight 50 Pounds**

**Harrell's, LLC**  
P.O. BOX 807  
Lakeland, FL 33802

**Batch No.**



# FERTILIZER W/STARTEEM® # 2

**A PRE-EMERGENCE HERBICIDE FOR USE GOLF COURSES, NURSERIES, GARDEN CENTERS, PARKS, and MUNICIPAL, FEDERAL, CORPORATE LAWNSCAPES.**

## ESTABLISHED ORNAMENTALS & GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
Abutilon	<i>Abutilon pictum</i>
	<i>Heliotropium</i>
Acacia	<i>Acacia</i> spp.
Agapanthus	<i>Agapanthus africanis</i>
Allamanda, common	<i>Allamanda cathartica</i>
Andromeda	<i>Pieris</i> spp.
Aralia	<i>Aralia spinosa</i>
Arborea	<i>Thuja</i> spp.
Ash, Green	<i>Fraxinus pennsylvanica</i>
Azalea	<i>Rhododendron</i>
Baby's Breath	<i>Gypsophila paniculate</i>
Bald Cypress	<i>Taxodium distichum</i>
Bamboo, Feathery	<i>Bambusa vulgaris</i>
Banyan, Weeping	<i>Ficus benghalensis</i>
Barberry	<i>Berberis</i> spp.
Beefsteak Plant	<i>Acalypha wilkesiana</i>
Bearberry	<i>Arctostaphylos uva-ursi</i>
Beech, European	<i>Fagus sylvatica</i>
Birch, Paper	<i>Betula papyrifera</i>
Blanket Flower	<i>Gaillardia aristata</i>
Blazing Star	<i>Liatris spicata</i>
Boxwood, Japanese	<i>Buxus microphylla</i>
Boxwood, Common	<i>Buxus sempervirens</i>
Bougainvillea	<i>Bougainvillea spectabilis</i>
Brassica, Dwarf	<i>Brassica actinophylla</i>
Buddleia	<i>Buddleia davidii</i>
Bugleflower	<i>Ajuga reptans</i>
Callistemon	<i>Callistemon lanceolata</i>
Camelia, common, Jap	<i>Camelia japonica</i>
Camelia, Sasanque	<i>Camelia sasanqua</i>
Candytuft	<i>Iberis sempervirens</i>
Carissa	<i>Carissa macrocarpa</i>
Carnation	<i>Dianthus caryophyllus</i>
Ceanothus	<i>Ceanothus americanus</i>
Cedar, Red	<i>Juniperus virginiana</i>
Cedar, Atlas	<i>Cedrus atlantica</i>
Cistus	<i>Cistus purpureus</i>
Citrus, Ornamental	<i>Myrtle</i>
Grapefruit	<i>Citrus paradisi</i>
Lemon	<i>Citrus Limon</i>
Lime	<i>Citrus aurantifolia</i> Bears
Mandarin	<i>Citrus reticulata</i>
Tangelo	<i>Citrus Xtangelo</i> Minneola
Tangerine	<i>Citrus reticulata</i> var. tangerine
Temple	<i>Citrus Xnobilis</i> Temple
Cuban Shaddock	<i>Citrus maxima</i>
Valencia	<i>Citrus sinensis</i>
Washington Navel	<i>Citrus sinensis</i>
Cleyera	<i>Cleyera japonica</i>
Coreopsis	<i>Coreopsis lanceolata</i>
Coromandel	<i>Asystasia gangetica</i>
Cotoneaster	<i>Cotoneaster</i> , spp.
Crabapple	<i>Malus</i> , spp.
Crape-myrtle	<i>Lagerstroemia indica</i>
Chrysanthemum	<i>Chrysanthemum</i> , spp.
Cypress	<i>Cupressus</i> , spp.
Cypress, Leyland	<i>Cupressocyparis leylandii</i>
Dahlia	<i>Dahlia</i> , spp.
Daphne, Fragrant	<i>Daphne odora</i>
Deutzia, Slender	<i>Deutzia gracilis</i>
Dieffenbachia	<i>Dieffenbachia</i> , spp.
Dogwood, Common	<i>Comus florida</i>
Dogwood, Redosier	<i>Comus stolonifera</i>
Dogwood, Kousa	<i>Comus kousa</i>
Douglas fir	<i>Pseudotsuga menziesii</i>
Elm	<i>Ulmus</i> , spp.
Escallonia	<i>Escallonia</i> , spp.
Eucalyptus	<i>Eucalyptus</i> , spp.
Euryops, Gray Leaved	<i>Euryops pectinatus</i>
Euonymus, Spreading	<i>Euonymus kiautschovicus</i>
Euonymus, Wintercreeper	<i>Euonymus fortunei</i>
Falsecypress, Hinoki	<i>Chaemeacyparis obtuse</i>
Falsecypress, Japanese	<i>Chaemeacyparis pisifera</i>
Flowering Quince	<i>Chaenomeles speciosa</i>
Forsythia	<i>Forsythia intermedia</i>
Gardenia	<i>Gardenia jasminoides</i>
Gazania Trailing	<i>Gazania uniflora</i> / <i>euclidean</i>
Ginko	<i>Ginkgo biloba</i>
Gladiolus	<i>Gladiolus</i> , spp.
Golden Rain-tree	<i>Koeleruteria paniculata</i>

## ESTABLISHED ORNAMENTALS & GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
Heather, Scotch	<i>Calluna vulgaris</i>
Heliotropium arborasc	
Hemlock, Canada	<i>Tsuga Canadensis</i>
Hibiscus	<i>Hibiscus</i> , spp.
Honeysuckle	<i>Lonicera</i> , spp.
Holly	<i>Ilex</i> , spp.
Ice Plant	<i>Carpobrotus edule</i>
Ilima	<i>Sida fallax</i>
Ivy, Algerian	<i>Hedera canariensis</i>
Ivy, English	<i>Hedera helix</i>
Jasmine, Orange	<i>Murray paniculata</i>
Jasmine, Primrose	<i>Jasminum mesnyi</i>
Jasmine, Star	<i>Telospermum jasminoides</i>
Jasmine, Showy	<i>Jasminum floridum</i>
Juniper	<i>Juniperus</i> , spp.
Justica	<i>Justica brandegeana</i>
Kwanzan Cherry	<i>Prunus serrulata</i>
Lamb's Ear	<i>Stachys byzantina</i>
Lantana, Trailing	<i>Lantana montividentis</i>
Lapalapa	<i>Cheirodendron</i> , spp.
Larch, European	<i>Larix deciduas</i>
Laurel, English	<i>Prunus laurocerasus</i>
Leopards — Bane	<i>Doronicum cordatum</i>
Leucothoe, Coast	<i>Leucothoe exillaris</i>
Leucothoe, Drooping (catesbaei)	<i>Leucothoe fontanesia</i>
Lily of the Nile	<i>Agapanthus, umbellatus</i>
Lilac	<i>Syringa</i> , spp.
Littleleaf Linden	<i>Tilia cordate</i>
Loquat	<i>Eriobotrya japonica</i>
Magnolia	<i>Magnolia</i> , spp.
Mahonia, Grape Holly	<i>Mahonia aquifolium</i>
Money Tree	<i>Pleomele marginata</i>
Murraea	<i>Murraea exotica</i>
Murraea	<i>Murraea exotica</i>
Murraea	<i>Murraea paniculata</i>
Myoporum	<i>Myoporum laetum</i>
Myrtus communis	
Nandina	<i>Nandina domestica</i>
Oak	<i>Quercus</i> , spp.
Ochana	<i>Ochana serrulate</i>
Ohai	<i>Samania samanarium</i>
Oleander	<i>Oleander</i>
Orthosiphon	<i>Orthosiphon stamineus</i>
Osmanthus	<i>Osmanthus heterophyllus</i>
Pachysandra	<i>Pachysandra terminalis</i>
Palm, Bamboo	<i>Rhapi excelsa</i>
Palm Fishtail	<i>Caryota</i> , spp.
Palm, Licuala	<i>Licuala Thumb.spp.</i>
Palm Macarthur	<i>Ptychosperme macarthurii</i>
Palm, Mabnee	<i>Euterpe</i> , spp.
Palm manila	<i>Veitchia merillii</i>
Palm, Parlor	<i>Collinia elegans</i>
Palm Rattan	<i>Deemonorops</i> , spp.
Palm,Scaling Wax	<i>Cyrtostachys lakka</i>
Palm, Sugar	<i>Arenge saccharina</i>
Paperbark Tree	<i>Melaleuca leucandendra</i>
Peony	<i>Peonia</i> , spp.
Periwinkle, common	<i>Vinca minor</i>
Periwinkle, Large	<i>Vinca major</i>
Photinia, Frasers	<i>Photinia fraseri</i>
Poinciana	<i>Dolomix regia</i>
Pine	<i>Pinus</i> spp.
Pittosporum, Japanese	<i>Pittosporum tobira</i>
Plum, Natal	<i>Carissa macrocarpa</i>
Podocarpus, Yew	<i>Podocarpus macrophyllis</i>
Pomegranate	<i>Punica granatum</i>
Poplar	<i>Populus</i> spp.
Potentilla	<i>Potentilla fruticosa</i>
Potentilla	<i>Potentilla fragiformis</i>
Privet	<i>Ligustrum</i> , spp.
Protea species	<i>Banksia menziesii</i>
	<i>Leucodendron discolor</i>
	<i>Leucodendron</i> spp.
	<i>Cordifolium</i>
	<i>Protea eximia</i>
Pyracantha	<i>Pyracantha coccinea</i>
Raphiolepis	<i>Raphiolepis umbellata</i>
Redwood, Dawn	<i>Metasequoia glyptostrob</i>
Rhododendron.	<i>Rhododendron</i> spp.

## ESTABLISHED ORNAMENTALS & GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
Rose, spp.	Rose, spp.
Russian Olive	<i>Elaeagnus angustifolia</i>
Sargent Cherry	<i>Prunus sargentii</i>
Scotch Broom	<i>Cytisus scoparius</i>
Sedum	<i>Sedum album</i>
Serviceberry, Saskatoon*	<i>Amelanchier alnifolia</i>
Spruce	<i>Picea</i> , spp.
Statice	<i>Limonium</i> , spp.
St. Johnswort, Goldencup	<i>Hypericum patens</i>
St. Johnswort, Golden	<i>Hypericum perforatum</i>
Strawberry Tree	<i>Arbutus unedo</i>
Sumac, Staghorn	<i>Rhus typhina</i>

## ESTABLISHED ORNAMENTALS & GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
Sweet William	<i>Dianthus barbatus</i>
Syzygium	<i>Syzygium paniculatum</i>
Trailing African Daisy	<i>Osteospermum fruticosum</i>
Yiburnum	<i>Yiburnum, spp.</i>
Wedelia	<i>Wedelia trilobata</i>
Wisteria, Chinese	<i>Wisteria sinensis</i>
Witchhazel, common	<i>Hamamelis virginiana</i>
Woadwaxen, common	<i>Genista tinctori</i>
Woolly Thyme	<i>Thymus pseudolanugirois</i>
Kylosma	<i>Taxus spp.</i>

For use on plants that will not bear edible fruit within 1 year of application.

## NEW TRANSPLANTED ORNAMENTALS AND GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
Blanket Flower	Gaillardia aristata
Brassia, Dwarf	Brassia actinophylla
Camelia	Camelia japonica
Carnation	Dianthus caryophyllus
Cedar, Red	Juniperus atlantica
Coromandel	Asystesia gangentica
Dogwood, Flowering	Cornus florida
Elm	Ulmus, spp.
Forsythia	Forsythia intermedia
Gazania, Trailing	Gazania uniflora leucocleana
Hackberry	Celtis occidentalis
Ivy, Algerian	Hedera canariensis
Ivy, English	Hedera Helix
Hemlock, Canada	Tsuga canadensis
Holly	Ilex, spp.
Ice Plant	Carpobrotus edule
Juniper	Juniperus, spp.
Leopards-Bane	Doronicum cordatum
Metallic Plant	Hemigraphis colorata
Oak	Quercus, spp.
Periwinkle, Common	Vinca minor
Periwinkle, Large	Vinca major
Pine	Pinus, spp.
Poplar	Populus, spp.
Privet	Ligustrum, spp.
Protea Species	Banksia menziesii
	Leucodendron discolor
	Leucospermum
	Cordifolium
	Protea eximia
Rhododendron	Rhododendron, spp.
Russian Olive	Eleagnus angustifolia
Spruce	Picea, spp.
Trailing African Daisy	Osteospermum fruticosum
Wedelia	Wedelia trilobata
Wisteria, Chinese	Wisteria sinensis

**Use on Lawns, Nurseries, Parks, Cemeteries, Garden Centers, University Campus Grounds, Ornamental Landscapes, for pre-emergence weed control around Ornamental Shrubs, Vines, Trees and Ground Covers.**

## WHERE, HOW MUCH AND WHEN TO USE around ORNAMENTALS

STARTEEM® pre-emergence herbicides can be applied anytime of the year prior to weed seed germination to both newly transplanted and established actively growing or dormant ornamental plants where both weed control and fertilization is desired. **The fertilizer values of STARTEEM® products can be tailored for your "special order" soil needs.** Rainfall or overhead irrigation will improve weed control activity. Do not mix into soil. Disturbing or cultivating the soil after treatment may reduce weed control results. Do not apply granules to wet foliage or under conditions in which granules will collect on leaves, if so, sprinkler-irrigate the plants to move granules off of foliage and down to soil level. Do not apply in greenhouses as plant injury may likely result.

10/10

# FERTILIZER W/STARTEEM® # 2

A PRE-EMERGENCE HERBICIDE FOR USE GOLF COURSES, NURSERIES, GARDEN CENTERS, PARKS, and MUNICIPAL, FEDERAL, CORPORATE LAWNSCAPES.

For best pre-emergence weed control around these ornamental plants first remove any existing weed growth. Rake, cultivate and smooth the soil surface by breaking-up clumps. Apply before weed seeds germinate (see map for regions) by broadcasting the granules evenly over the prepared soil.

For over all pre-emergence weed control around ornamentals as listed on this label with or without the asterisk use the STARTEEM 1-3 SPLIT Program. First apply STARTEEM #1 OR #2 40 to 60 days before weed seeds germinate; at 200 lbs per acre (equal to 4.6lbs per 1,000 sq. ft.) and follow within 60 days with the second application using STARTEEM #3 at the same rate; 200 lbs per acre.

## STARTEEM-SPLIT Application Rates to apply around Ornamentals

FIRST APPLICATION – 40 to 60 days before weed seed germination use STARTEEM #1 or #2 – at 200 # / acre  
SECOND APPLICATION – applied within 60 days of the first application use STARTEEM #3 at 200 lbs / acre

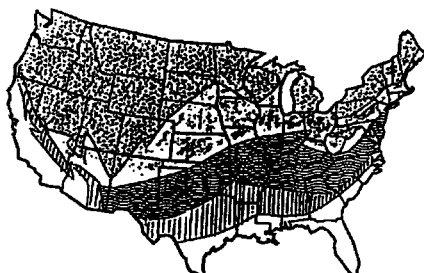
## ANNUAL BROADLEAF WEEDS AND ANNUAL GRASSES

Annual Bluegrass  
Annual Sedge  
\*Barnyardgrass  
Bittercress  
Carpetweed  
Carpetgrass  
Common Groundsel  
Common Purslane  
Crabgrass  
\*Evening Primrose  
Fireweed  
Field Sandbur

Fall Panicum  
Florida Pusley  
\*Galinsoga  
Golden Ragwort  
\*Goosegrass  
\*Jungle Ricegrass  
Lambsquarter  
\*Liverwort  
Oxalis  
\*Panama Paspalum  
Pennsylvania Smartweed

Redroot Pigweed  
Sensitive Plant  
Shepardspurse  
Sow thistle  
Speedwell  
Spotted Catsear  
Spurge; Garden; Petty  
\*Prostrate  
Stinging Nettle  
\*Swinecress  
Virginia Buttonweed  
Yellow Woodsorrel

## Crabgrass Seed Germination Dates



Mid-north & northwestern  
Upper/mid-states & northeast  
Lower mid-states  
Upper southern states  
Warm season states

### Approximate Date

- After May 30
- After May 10
- After April 20
- After March 20
- January 1 to March 20

## FOREST NURSERY APPLICATION

Common Name	Scientific Name
Pine, Loblolly	Pinus, taeda
Pine, Eastern White	Pinus, Strobus
Pine, Slash	Pinus, Canbaea

## SENSITIVE PLANTS

Under certain growing conditions, the plant varieties listed below may be sensitive to this product. Growers should evaluate usage on a small scale prior to large scale applications.

### PLANT SPECIES

Andromeda (pieris jaonica)  
Azalea

### VARIETIES

Snowdrift, Temple Belt  
Pink Champagne, Hershey, (Rhododendron spp. Leuchtenfuer, Memoire John Hearrens, Kimo Crimson, White Grandeur, Everest, Girard Roberta  
Eichholz, Himalayan, Shangri-la (Cotoneaster spp)  
Petite Red Imperial, and Seminole Bush

Cotoneaster  
Crapemyrtle  
(Lagerstroemis indica)

Mediterranean Pink

Heath, Spring  
(Erica cameo)

Pendula

Hemlock, Canada  
(Tsuga Canadensis)

Hibiscus (Hibiscus Syriacus)

Red Heart

Rhododendron

Daphnoides, Nova Lentia, Rhododendron spp, Calawba Album

Spruce, Norway (Picea abies)

Pumila

Spruce, White (Picea glauca)

Densata

Viburnum

Davidii

(Viburnum spp)

EPA Reg. No. 52287-11

Net Weight 50 Pounds

Batch No.

EPA Est. No. 52287-FL-1

**Harrell's, LLC**

P. O. Box 807 \* Lakeland, FL 33802