

70506-107

8/26/2010

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:

Date of Issuance:

70506-107

AUG 26 2010

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Name of Pesticide Product:

PoaConstrictor Herbicide

Name and Address of Registrant (include ZIP Code):

United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406

~~Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.~~

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA section 4(g)(2)(C) provided you:

1. Submit and/or cite all data required for registration review/reregistration of your product when the Agency requires all registrants of similar products to submit data.
2. Make all the following changes to the product label:
 - a. Change the EPA Reg. No. to "70506-107".
 - b. Due to the acute toxicity of this product, the signal word, First Aid statements, and the Hazards to Humans and Domestic Animals statement are not required for this product.
 - c. Change the PPE phrase to read "If no such instructions for washables **exist**,"
 - d. Change the Environmental Hazards phrase to read "equipment washwaters **or rinsate**."
 - e. On page 2, move the restrictions "Do not graze livestock on treated turf. Do not feed treated grass clippings to livestock." to the USE RESTRICTIONS AND PRECAUTIONS section.
 - f. On page 3, change the heading from "GENERAL INFORMATION" to "PRODUCT INFORMATION".

Continued on Page 2

Signature of Approving Official:

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)

Date:

AUG 26 2010

2014

- g. Due to the importance of resistance management to a long-term pest-management strategy, it is suggested that resistance management grouping symbols and statements be included on the labeling as described in PR Notice 2001-5.
- h. On page 2, add the Engineering Controls for commercial dry bulk fertilizer impregnation applications as follows:

“Handlers must use a closed system designed by the manufacturer to provide dermal and inhalation protection to enclose the pesticide to prevent it from contacting handlers or other people AND the system is functioning properly and is used and maintained in accordance with the manufacturer’s written operating instructions.

The handlers:

- must wear the PPE listed on this label and
 - must wear protective eyewear if the system operates under pressure
 - must have immediately available for use in an emergency, such as a spill, or equipment breakdown, chemical resistant footwear and chemical resistant apron”
- i. Throughout the label, change the use site from “homeowner lawn” to “residential lawn”.
 - j. Throughout the label, change the product application rate unit from “oz” to “fl oz”.
 - k. On page 4, change the heading from “USE PRECAUTIONS” to “USE RESTRICTIONS AND PRECAUTIONS”. It is suggested that the advisory precautions be distinguished from the mandatory restrictions by placing them under separate subsections.
 - l. On page 5, change the heading from “General Instructions” to “Use Instructions”.
 - m. On page 10, change the phrase from “use rate recommended” to “use rate specified”.
 - n. Move the statement “Do not contaminate water, food, or feed by storage and disposal.” from the Pesticide Disposal section to directly below the Storage and Disposal heading.
 - o. Change the heading from “Storage” to “Pesticide Storage”.
 - p. Change the Container Disposal statement to read as follows:

“Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.”

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The basic and alternate confidential statements of formula (CSF) dated January 29, 2009 are acceptable.

A stamped copy of your label is enclosed for your records. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after twelve (12) months from the date of this notice or the next printing of the label, whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Enclosure

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ACCEPTED
with COMMENTS
In EPA Letter Dated:
AUG 26 2010
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

POACONSTRICTOR

Herbicide

NOT FOR USE ON COMMERCIAL SOD FARMS IN ARIZONA
SUSPENSION CONCENTRATE HERBICIDE

For sale and use by professional applicators only. Not for sale or use by homeowners/consu^{ers}. 70506-107

ACTIVE INGREDIENTS:
Ethofumesate: (2-ethoxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate)*42%
OTHER INGREDIENTS:58%
TOTAL:.....100%

*This product contains 4 lbs. active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION PRECAUCION

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.)

For 24-Hour Emergency Contact, call CHEMTREC (1-800-424-9300)

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • 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 do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move 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 in eyes:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the Rocky Mountain Poison Center at 1-866-673-6671 for emergency medical treatment information.	

United Phosphorus, Inc.
630 Freedom Business Center
King of Prussia, PA 19406

EPA Reg. No. 75522-3
EPA Est. No. 37429-GA-1

1-800-438-6071 • www.upi-usa.com

Net Contents: 2.5 Gallons

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals**CAUTION**

Harmful if swallowed or inhaled. Avoid breathing vapor or spray mist.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are polyethylene or polyvinyl chloride. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

All mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (except flaggers, or applicators in cockpits, and enclosed cabs)
- Shoes and socks

See Engineering Controls for additional requirements.

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. . Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 17-.240(d)(6)].

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately, if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide may be toxic to fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters.

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 Warranty Disclaimer 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.

SHAKE CONTAINER WELL BEFORE USING

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
- Shoes and socks
- Chemical-resistant gloves made of any waterproof material

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow others to enter until sprays have dried.

Professional pesticide applicators applying to residential turf, including home lawns, parks, and recreation areas must inform their customers that all persons and pets must be kept off the treated turf until sprays have dried.

SPRAY DRIFT MANAGEMENT

This chemical can contaminate surface water through spray drift.

A variety of factors including weather conditions (e.g. wind direction, wind speed, temperature, relative humidity) and method of application (e.g. ground, aerial) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Wind Speed

Do not apply when wind speeds are greater than 15 mph.

Temperature Inversions

Do not make applications into areas of temperature inversion or stable atmospheric conditions.

GENERAL INFORMATION

POACONSTRICOR is a herbicide intended for use on ornamental turf such as golf courses, sod farms, parks, cemeteries and homeowner or commercial lawns, and after overseeding specific grasses. It may be used on established perennial ryegrass, Kentucky bluegrass, creeping bentgrass, turf-type tall fescue, St. Augustinegrass, and dormant bermudagrass for the control and/or suppression of the annual grasses and broadleaf weeds listed in the tables below. POACONSTRICOR is for professional use only.

POACONSTRICTOR has both preemergent and early (two-leaf stage) postemergent activity and works best in programs emphasizing both approaches. POACONSTRICTOR application is most effective on healthy, vigorously growing turf.

WEED SPECIES CONTROLLED

PREEMERGENCE

Annual Grasses

Barnyardgrass (*Echinochloa crus-galli*)
Bluegrass, annual (*Poa annua*)
Canarygrass (*Phalaris canariensis*)
Crabgrass, large (*Digitaria sanguinalis*)
Crabgrass, smooth (*Digitaria ischaemum*)
Foxtail, green (*Setaria viridis*)
Foxtail, yellow (*Setaria glauca*)

Annual Broadleaves

Burclover (*Medicago* sp.)
Chickweed, common (*Stellaria media*)
Purslane, common (*Portulaca oleracea*)
Pigweed, redroot (*Amaranthus retroflexus*)

POACONSTRICTOR will also reduce competition from:

Nutsedge, purple (*Cyperus rotundus*)
Nutsedge, yellow (*Cyperus esculentus*)

POSTEMERGENCE

Annual Grasses

Bluegrass, annual (*Poa annua*)

Annual Broadleaves

Chickweed, common (*Stellaria media*)
Clover, white (*Trifolium repens*)

PREEMERGENCE/EARLY POSTEMERGENCE

Annual Grasses

Crabgrass, large (*Digitaria sanguinalis*)
Crabgrass, smooth (*Digitaria ischaemum*)

USE PRECAUTIONS

- POACONSTRICTOR is not intended for use by homeowners and may only be applied to homeowner lawns by professional applicators.
- **DO NOT OVERAPPLY POACONSTRICTOR.** Follow the instructions in this label or damage to non-target turf may result.
- Spray overlap can cause turf injury due to over application. Use of a spray colorant or indicator is recommended so that spray overlap can be avoided.
- Do not apply with hand-held or flood jet nozzles because treatments may not be uniform.
- Do not apply this product through any type of irrigation system.

- When using POACONSTRICTOR, overseed to prevent stand thinning as a result of loss of annual bluegrass loss. Use the rate of POACONSTRICTOR specified for the overseeded species when overseeding. In mixed stands of established turfgrasses, use the rate specified for the *least* tolerant species.
- Delay application of POACONSTRICTOR at least 8 weeks after application of a Plant Growth Regulator, although a POACONSTRICTOR program may be initiated on creeping bentgrass 3 weeks after a single application of PRIMO* has been applied.
- Do not apply POACONSTRICTOR to putting greens.
- Do not apply POACONSTRICTOR to zoysiagrass and hard or fine fescue to avoid serious injury.
- Do not harvest treated sod for 3 days following application.

Spray Equipment, Application, and Precautions

Use standard, low-pressure (20 to 50 psi) spray equipment to apply POACONSTRICTOR. Calibrate spray equipment prior to use and frequently check the equipment during application. Use a spray indicator to aid in even application. Prior to and after applying POACONSTRICTOR, thoroughly clean and rinse the spray tank and line.

Varietal Tolerance

Ethofumesate (the active ingredient in POACONSTRICTOR) has been used on the following turfgrass cultivars. However, POACONSTRICTOR can be used on other cultivars. Prior to large-scale use of POACONSTRICTOR on cultivars other than listed below, test a small area for tolerance.

- **CREEPING BENTGRASS**—The following cultivars have shown good to excellent tolerance to POACONSTRICTOR: Carmen, Cobra, Highland, Lopez, Mariner, National, Penncross, Providence, Putter, Southshore, SR1020, and Viper.
Injury has been occasionally noted on Emerald, Penneagle, and Pennlinks cultivars.
POACONSTRICTOR may cause serious injury to Cohansey, Colonial, south German varieties, Egmont, Bardot, Tracenta, Allure, Astoria, and SR7100.
- **DORMANT BERMUDAGRASS**—Tifgreen, Tidwarf and Common bermudagrass are more susceptible to POACONSTRICTOR than hybrid bermudagrass.
- **KENTUCKY BLUEGRASS**—Adelphi, American, Aspen, Asset, Challenger, Classic, Emundi, Huntsville, Georgetown, Glade, Haga, Julic, Liberty, Merit, Midnight, Monopoly, Mystic, Parade, Rugby, Sydsport, Touchdown. NOTE: DO NOT APPLY to Explorer, Limousine, Northstar, RAN I and Total Eclipse.
- **PERENNIAL RYEGRASS**—Acclaim, Blazer, Dasker, Derby, Elka, Fiesta, Goalie, Hunter, Linn, Loretta, Manhattan II, Palmer, Pennfine, Regal, Yorktown
- **ST. AUGUSTINEGRASS**—Raleigh
- **TURF-TYPE FALL FESCUE**—America, Arid, Mustang

General Instructions

- For fall control of annual bluegrass, begin applications of POACONSTRICTOR during the period of maximum weed germination and end as close to the first killing freeze as possible.
- Make spring applications during the period of maximum weed germination. Consult your weed science specialist or university extension service for the recommended application timing in your area. Spring applications are most effective following fall applications.

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

Rates and Timings

Turf Type	Primary Targets	Application Timing	Use Rate ¹			Application Interval (Days)	Overseeding Safety Interval ³ (Weeks After Treatment)	Application Safety Interval ⁴ (Weeks After Emergence)
			Oz/Acre	Oz/1000 Sq. Ft.	# of Apps			
Creeping Bentgrass	Annual Bluegrass	Fall	24	9/16	2-3	21-28	4	4
		Spring ²	24	9/16	1-2	21-28		
Kentucky Bluegrass	Annual Bluegrass	Fall	24	9/16	2-3	21-28	6	8
Ryegrass	Annual Bluegrass	Fall	32-64	¾ - 1½	2-3	21-28	1-2	1-2
		Spring ²			1-2	21-28		
St. Augustinegrass (Est. Turf)	Bermudagrass Suppression	Spring	48-64	1 1/8 - 2¼	2-3	21-28	NA	NA
Turf-Type Tall Fescue	Annual Bluegrass	Fall	24-48	¾ - 1½	2-3	21-28	0	2-3
Overseeded (ryegrass) Bermudagrass:								
Dormant Bermudagrass	Annual Bluegrass	Fall	24-64	9/16 - 1½	2-3	21-28	NA	NA
Nondormant Bermudagrass	Annual Bluegrass	Fall	32-36	¾ - 7/8	2	21-28	NA	NA

NA - Not applicable.

¹Apply POACONSTRICTOR in 20 to 60 gallons of water per acre or 1 to 3 gallons of water per 1000 sq. ft.

²Only make spring applications after previous fall treatments.

³After the last treatment of POACONSTRICTOR, the interval provided applies to overseeding of the specific grass on same type of grass to which POACONSTRICTOR was applied.

POACONSTRICTOR may be applied to specific grass following seed emergence after the specified time interval.

DIRECTIONS FOR SPECIFIC GRASS TYPES

COOL SEASON TURFGRASSES

Creeping Bentgrass

POACONSTRICTOR may be applied to bentgrass as long as the turf is at a length typically found on fairways (or longer). When applying to bentgrass, use the following guidelines.

- Avoid using POACONSTRICTOR in areas that are heavily shaded and / or poorly drained.
- Creeping bentgrass tolerance to POACONSTRICTOR may be improved by tank mixing POACONSTRICTOR with nitrogen fertilizer (controlled release or soluble) at a rate of 0.1 to 0.25 lb N per 10,000 ft². This may also improve creeping bentgrass conversion in the areas treated.
- Control of annual bluegrass is best achieved by making two applications of POACONSTRICTOR; one in the fall followed by one in the spring.
- POACONSTRICTOR works best in the spring if applied after creeping bentgrass has resumed active growth and is fully green.

When overseeding with creeping bentgrass, use the following guidelines:

- After applying POACONSTRICTOR, wait a minimum of 3 – 4 weeks before overseeding with bentgrass.

- When an area has been renovated or overseeded with bentgrass, do not apply POACONSTRICTOR until 3 – 4 weeks after seedling emergence.

Kentucky Bluegrass

- Delay application of POACONSTRICTOR to bluegrass until at least 8 weeks after emergence.
- Bluegrass overseeded with ryegrass may be treated with POACONSTRICTOR 1 – 2 weeks after ryegrass emergence.

When overseeding with Kentucky Bluegrass use the following guidelines:

- Wait at least six weeks after the last POACONSTRICTOR application before reseeding with Kentucky bluegrass.
- Note that sod quality during the spring may be diminished following fall applications of POACONSTRICTOR. Alternatives to fall application of POACONSTRICTOR include seeding with dormant bluegrass in the late fall or to delay reseeding until the spring.

Perennial Ryegrass

Control of annual bluegrass in perennial ryegrass is easiest when it is newly emerged, and application of POACONSTRICTOR is made during the primary period of annual bluegrass germination (and up to 30 days after annual bluegrass emergence) in the fall and/or spring. Consult your local Extension Service or university weed specialist for the date(s) that annual bluegrass germinates in your area.

- For best results, apply POACONSTRICTOR in both the fall and spring.
- Application in the fall or spring will also reduce competition from selected broadleaf weeds and crabgrass.

When overseeding with perennial ryegrass, use the following guidelines:

- Wait 1 – 2 weeks (or until the seedlings are approximately 1" tall) before applying POACONSTRICTOR to the seeded area.
- To the extent possible, remove thatch from the area being seeded as it can diminish the effectiveness of the POACONSTRICTOR treatment.
- Do not apply mulch or straw to the seeded areas until after POACONSTRICTOR has been applied.

Turf-Type Tall Fescue

Make POACONSTRICTOR applications to turf-type tall fescue in the fall. If overseeding with turf-type tall fescue, application of POACONSTRICTOR may be done at the same time as seeding.

WARM SEASON TURFGRASSES

St. Augustinegrass (Established Turf)

POACONSTRICTOR suppresses the development of actively growing Bermudagrass in established St. Augustine sod. Apply POACONSTRICTOR Herbicide to St. Augustinegrass in the spring and early summer to suppress bermudagrass and Bermudagrass seedhead formation and/or for control of annual bluegrass.

Notes regarding applications to St. Augustinegrass:

- Do not treat St. Augustinegrass in the first six months after germination.
- Do not treat St. Augustinegrass that is under stress or injury to the turf may result.
- Temporary stunting and minor discoloration of St. Augustinegrass may occur after application. If the St. Augustinegrass shows signs of severe yellowing or stunting, discontinue applications.

Use the following guidelines when applying POACONSTRICTOR to St. Augustinegrass:

- Begin POACONSTRICTOR 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.
- For best results, make multiple applications of POACONSTRICTOR with the second application being made 21 – 28 days after the first application.
- A third application made 21 – 28 days after the second application may be necessary for maximum suppression of bermudagrass or annual bluegrass.
- To improve suppression, each application of POACONSTRICTOR may be tank-mixed with (Atrazine at up to 2 lb ai/A for first application and 0.75 lb - 1 lb ai/A triazine for second or third application).

Overseeded Dormant Bermudagrass

Notes regarding applications to Bermudagrass:

- **Do not make** more than two applications of POACONSTRICTOR when treating nondormant bermudagrass. Treatment to turf that is not fully dormant may cause early injury and/or delayed spring green-up.
- Application of POACONSTRICTOR to bermudagrass that is stressed due to shade, poorly drained soils, and high traffic may result in increased turf injury. Avoid use of POACONSTRICTOR or use lower rates under these conditions.

Use the following guidelines when applying POACONSTRICTOR to Bermudagrass:

- To control annual bluegrass, make applications of POACONSTRICTOR in late fall (ideally 1 – 2 weeks after emergence of overseeded perennial ryegrass) on overseeded bermudagrass.
- When POACONSTRICTOR is applied in late November or early December, applications of 32 - 36 oz. per acre have shown acceptable control of annual bluegrass with minimum injury to nondormant (or predormant) bermudagrass. If lower rates are used, reduced annual bluegrass control should be expected. If higher rates are used, increased injury to Bermudagrass may occur.
- One or two supplemental applications made through the winter (at 21 - 28 day intervals) may assist in controlling annual bluegrass.
- Do not apply POACONSTRICTOR to Bermudagrass in the 4 weeks prior to breaking winter dormancy. Applications made to Bermudagrass in the 4 weeks prior to breaking dormancy may temporarily delay the normal start of active growth.

When overseeding bermudagrass, use the following guidelines:

- Common bermudagrass in fairways or roughs may be more susceptible to herbicide injury than hybrid bermudagrass.
- When making applications to nondormant bermudagrass, apply POACONSTRICTOR within areas that are overseeded so that the ryegrass will mask any early injury or late transition in the spring that may occur.
- Using a higher than normal seeding rate may be desirable in order to minimize the appearance of thin turf.

POACONSTRICTOR Mixtures with Fertilizers

POACONSTRICTOR Impregnation on Dry Bulk Fertilizers

POACONSTRICTOR may be impregnated on many dry bulk fertilizers (See “1” below.) and applied for the control of labeled grasses and broadleaf weeds. All POACONSTRICTOR label and supplementary literature

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instructions and precautions regarding rates per acre, soil type, application, and other directions must be followed. All individual State regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the POACONSTRICTOR fertilizer mixtures. A minimum of 200 pounds and a maximum of 700 pounds of approved fertilizer ingredients impregnated with the appropriate amount of POACONSTRICTOR must be applied per acre. For impregnating the pesticide on dry fertilizers, use a closed rotary drum type mixer equipped with suitable spraying equipment. Position the spray nozzles inside of the mixer to provide uniform spray coverage of the tumbling fertilizer. Spray POACONSTRICTOR uniformly onto the fertilizer using a fine spray pattern.

The physical properties of fertilizers vary, particularly in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with POACONSTRICTOR provides a satisfactory dry mixture. If the absorptivity is not adequate, use of a highly absorptive powder is required to provide a dry, free-flowing mixture. Microcel E (Johns-Manville Products Corporation) is the recommended absorbent powder. Add it separately and uniformly to the prepared pesticide/fertilizer mixture in a quantity that is sufficient to provide a suitably free-flowing mixture. Generally, less than 2% by weight of Microcel E is required.

The amount of POACONSTRICTOR actually required in the formulation of specific fertilizer mixtures must be calibrated carefully for each production operation. This is necessary to ensure that the amount of POACONSTRICTOR actually contained in the fertilizer mixture applied to the soil represents the correct dosage rate.

Apply bulk fertilizers impregnated with POACONSTRICTOR immediately. DO NOT STORE THEM.

1. Approved dry fertilizer ingredients for use with POACONSTRICTOR

POACONSTRICTOR Impregnation on Dry Bulk Fertilizers

	N	P	K
Ammonium nitrate	34	0	0
Ammonium sulfate	21	0	0
Ammonium phosphate-sulfate	16	20	0
Diammonium phosphate	18	46	0
Monammonium phosphate	11	56	0
Potassium chloride	0	0	60
Potassium sulfate	0	0	52
Single superphosphate	0	20	0
Triple superphosphate	0	46	0
Urea	45	0	0

POACONSTRICTOR Physical Data	
Density	1.14 g/cm ³
Pounds/gallon	9.50
Flashpoint	Non-combustible

POACONSTRICTOR with Liquid Fertilizer

The following procedure is suggested for evaluation of physical compatibility of POACONSTRICTOR Herbicide in mixtures with liquid fertilizers for spray tank applications.

Material Required

1. POACONSTRICTOR - components of tank sizes if intended for use
2. Liquid fertilizer to be used
3. Adjuvant for fertilizer tank mix: Compex* or E-Z Mix**

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4. Two (or more) one quart, wide mouth containers with lids or stoppers
5. Measuring spoons (25 ml pipette or graduated cylinder provides more accurate measurement)
6. Measuring cup, 8 fl. oz. (237 ml)

*Compex, Kalo Laboratories, Inc., Kansas City, MO

**E-Z Mix, United Agri-Products, Greeley, CO

Procedure

1. Pour one pint (473 ml) of the liquid fertilizer into each of the quart containers.
2. Add adjuvant(s) to one or more of the containers and mix; follow label directions of adjuvant.
3. Add the POACONSTRICTOR and tank mix components to the containers (see rate table below).
4. Close the containers with lids or stoppers and mix contents by inverting the containers ten times.
5. Inspect the surface and body of mixture:
 - a. immediately after mixing,
 - b. after allowing mixtures to stand quietly for 30 minutes,
 - c. immediately after mixing again (invert the containers ten more times).

If uniform mixture does not occur, do not use the spray tank mixture. If any of the mixtures remain uniform for 30 minutes, that mixture may be used in spray tank applications. Should any of the mixtures separate after 30 minutes but remix readily into a uniform mixture with inversion of the container, the mixture may be used provided that the adequate agitation is maintained in the spray tank. If a POACONSTRICTOR + fertilizer mixture utilizing an adjuvant is satisfactory, but the one without adjuvant is not, be sure to use the adjuvant in the spray tank at the rate specified on the label which was used in the test.

If non-dispersible oil, sludge, or clumps of solids form in the mixtures, do not use those combinations for spray tank application.

**Rate Table for POACONSTRICTOR
Mixtures with Liquid Fertilizers**

Gal. of Liquid Fertilizer to be applied per acre	ml or tsp of POACONSTRICTOR to be added to 1 pint of fertilizer	
	gal	tsp.
20	17.6	3.6
30	12.0	2.4
40	9.0	1.9
50	7.1	1.5
60	6.0	1.2

*Based on field rate of 3.0 lb. ai/acre (3/4 gal/acre) in the fertilizer volumes indicated. Adjust amount of POACONSTRICTOR added proportionately to correspond with intended field use rate recommended on POACONSTRICTOR label. Add the proportionate amount of tank mix component.

STORAGE AND DISPOSAL

Storage: Protect POACONSTRICTOR from freezing temperatures.

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 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.

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DO NOT REUSE EMPTY CONTAINER

IMPORTANT INFORMATION

READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

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