

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

JUL 28 2004

Mr. Rich Lotstein NAFTA Regulatory Team Leader Syngenta Crop Protection, Inc. P.O. Box 18300 Greensboro, NC 27419

Dear Mr. Lotstein:

Subject: Lawn Primo® F

EPA Registration No. 100-931

Application and Letter Dated May 12, 2004, Request To Amend the Registration: "Amendment to Update First

Aid, and Other Minor Changes"

The subject application to amend the registration of Lawn Primo® F with revised labeling has been reviewed and found to be acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended; provided that you:

- 1. Submit a revised basic Confidential Statement of Formula (CSF) on EPA Form 8570-4 that reflects the change of active ingredient on the label, i.e.: 0.17%.
- 2. The added statement on the front panel, "Treats up to sq. ft." is misleading on the labels and must be deleted. The using public would have to read the labeling that follows to find that such a claim did not apply to the needs for use of this product in most turf uses.
- 3. Under "Directions for Use" the sentence that reads:
   "Lawn Primo F should be used...or in separately
   published Syngenta supplemental labeling recommendations
   for this product.", must be revised by deleting the
   phrase "or in separately published Syngenta supplemental
   Labeling recommendations for this product". You may
   revise the phrase to read: "or in EPA registered
   supplemental labeling for this product".
- 4. On the "For Homeowner Use Only" labeling the "Pesticide Disposal" statement must be revised to comply with PR Notice 2001-6.

- 5. The rate limitation: "Do not exceed 33.8 lbs/1000 sq. ft. (2.5 lbs a.i./Acre per year" should be in the foot notes of charts and tables of dosages on both the Commercial Use Only and the "For Homeowner Use Only" labeling.
- 6. The "SCP" and ©200X Syngenta, and Primo® are claimed as trademarks of a Syngenta Group Company".

  Provide this Agency the address of the company.
- 7. Submit one copy of the final printed labeling prior to shipping under the revised labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA, section 6(e). Your release for shipment of this product under the revised labeling constitutes acceptance of these conditions. A stamped copy of the accepted labeling is enclosed for your records.

Sincerely yours,

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

Enclosures(2 stamped labels)

## {For Commercial Use Only}

(FRONT PANEL)

## Lawn Primo® F For Turf Growth Management

Active Ingredient:	
trinexapac-ethyl (CAS No. 95266-40-3)	
-4-(cycopropyl-a-hydroxy-methylene)-3-5-dioxo-cyclohexanecarboxylic acid ethyl ester	0.17%*
Other Ingredients:	99.83%*
Total:	100.00%
*Note: The level of active ingredient and inert ingredients wi specified by the Confidential Statement of Formula. Label DI	

## KEEP OUT OF REACH OF CHILDREN.

## **CAUTION**

See back panel for additional precautionary statements.

EPA Reg. No. 100-931 EPA Est. No.	
SCP	
Treats up tosq.	ft.
pounds Net Weight	

ACCEPTED
with COMMENTS
in FPA Latter Detect

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

100-931

## (BACK PANEL)

## Lawn Primo® F

Guai	anteed Analysis
Total Nitrogen (N)	8.0%
Available Phosphate (P205)	1.0%
Soluble Potash (K20)	1.0%
·	
Plant Nutrients Derived From: Ammor	nium Phosphate, Muriate of Potash, Urea

## KEEP OUT OF REACH OF CHILDREN.

## **CAUTION**

Treats up to \_\_\_\_\_ sq. ft.
\_\_\_\_ pounds
Net Weight

	FIRST AID
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have a person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
	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 treatment advice ontainer or label with you when calling a poison control center or
doctor, or going for	
	HOT LINE NUMBER  Hour Medical Emergency Assistance (Human or Animal) or cal Emergency Assistance (Spill, Leak, Fire, or Accident),  Call  1-800-888-8372

## **PRECAUTIONARY STATEMENTS**

## **Hazards to Humans and Domestic Animals**

Causes eye irritation. Do not get in eyes. Harmful is swallowed or absorbed through skin. Avoid contact with skin or clothing.

#### **Environmental Hazards**

Do not apply directly to water. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater. Do not apply when weather conditions favor drift from treated areas.

## 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 should be followed carefully. It is impossible to eliminate all risks inherently 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 SYNGENTA CROP PROTECTION, INC. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER. THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## **DIRECTIONS FOR USE**

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

Lawn Primo F should be used only in accordance with recommendations on this label or in separately published Syngenta supplemental labeling recommendations for this product.

Read entire label before using this product.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN UNEVEN GROWTH REDUCTION OR SEVERELY STUNTED TURF.

Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes. For outdoor use on commercial turf such as residential lawns, golf courses, cemeteries, parks, athletic fields, institutional and school turf areas.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal. Keep container closed and away from food, feedstuffs and domestic water supplies.

## Pesticide Storage?

#### **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide 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**

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by alternatives allowed by State or local authorities.

#### **GENERAL INFORMATION**

Lawn Primo F is a unique granular formulation of Primo, the turf growth regulator product that allows low-level fertilization to be applied at this same the growth rate is being regulated. Extensive field-testing has indicated that these two operations are complementary, when applied as directed. The fertilizer in this product enhances the performance of the growth regulator at the same time it contributes to the color and

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density of the turf, working in harmony with the active ingredient. This product allows golf course operators, commercial turf managers, and lawn care companies to reduce the frequency of mowing and the amount of grass clippings by approximately 50% over a four-week period.

A quality turf stand means the grass is actively growing, but a high growth rate can be difficult and costly to manage. The use of Lawn Primo F is valuable in many ways, such as the following:

- Whenever a granular application is preferred over applications of a liquid growth regulator product
- When mowing operations conflict with uses such as frequent golf play, athletic events, or other outdoor events of extended duration
- During times of undesirable heavy grass growth, such as Spring, when frequent rains limit the opportunity for mowing
- · On steeply sloped ground
- In areas under air pollution restrictions which restrict mowing
- As a "green edger," in lawn border areas
- Around mowing obstacles, such as fences, trees and shrubs, monuments and markers
- Whenever mowing crews or equipment are unavailable
- To reduce moving labor and equipment maintenance expenses

The active ingredient in Lawn Primo F is time-tested by years of extensive use on golf courses and by commercial lawn maintenance/mowing companies. The proper use of Lawn Primo F offers the following benefits:

- About half as much clipping volume to collect and recycle
- Allows for a longer interval between mowings
- Redirects grass growth energy into roots and shoots, frequently improving turf density and durability
- Frequently reduces watering requirements
- Frequently increases density, color, traffic resistance, and quality of the turf
- Will not harm neighboring plantings
- · Seed germination is not affected
- Doesn't kill the grass or other plants like other chemical edger products
- Watering in is not required

#### **APPLICATION INFORMATION**

Environmental conditions, management, and cultural practices that affect turf growth and vigor will influence the response of the turf to Lawn Primo F applications. Fertility level, moisture availability, leaf wetness at the time of application, plant vigor, height,

and frequency of mowing, etc. have been shown to influence the activity of Lawn Primo F.

The rates presented in the <u>Application Rate Table</u> provide approximately 50% growth inhibition over a 4-week period with little or no discoloration of turf growing under favorable conditions.

Excessive turf growth, which may occur under high fertilization program or during spring flushes, may require higher rates of Lawn Primo F. Under these conditions, Lawn Primo F rates may have to be increased up to 50% to provide an adequate length of control.

Lawn Primo F use rates may need to be reduced up to 50% for turfgrass grown under conditions of low fertility, compaction, or other factors which stress the turf.

Adjust your fertilization program to account for the fertilizer applied as a part of this product.

Multiple applications can be made each growing season but do not exceed a total of 33.8 pounds per 1000 sq. ft. (2.5 lbs. Al/A) per year.

## Mowing

Generally, Lawn Primo F provides more suppression when turfgrasses are mowed at lower mowing heights than higher mowing heights. Application rates have been selected for typical mowing heights. The application rate may need to be adjusted depending on actual mowing conditions. It is suggested that Lawn Primo F not be applied less than 24 hours before or 4 hours after mowing to minimize mower pickup problems or any potential turfgrass injury. Do not mow so low as to "scalp" the turf, exposing lighter-colored crown tissue, and do not remove more than about 1/3 of the leaf height when mowing. For lawns, raise mowing height when turf undergoes stress or enters dormancy due to heat or drought.

#### **Application Timing**

Apply Lawn Primo F to actively growing turf. Reduce Lawn Primo F rates on turf going into dormancy due to high or low temperatures or lack of moisture. Repeat applications of Lawn Primo F may be made as soon as the turf resumes growth or more suppression is desired. For best results, avoid application by broadcast spreaders under windy conditions, which may cause misapplication due to distortion of the application swath. For best results, apply when the turf is wet from dew or irrigation.

#### Equipment

Apply Lawn Primo F evenly, using the recommended rates and equipment capable of proper application of this product. Use only equipment designed for application of

granular pesticides which has been properly calibrated and which is in good working order. Avoid skips and excessive over applications as poor growth regulation or turfgrass injury may occur. See spreader settings table for recommended spreaders and settings. For use only as a "green edger," a drop spreader is most efficient. If a broadcast spreader is used, center the heaviest part of the swath over the lawn border area.

## **Application Near and Around Monuments and Hardscape Materials**

Lawn Primo F may stain or discolor stain brass, bronze, concrete, marble, granite, or other types of stone due to the fertilizer. Before using Lawn Primo F around these or other types of stone, test on a small scale basis first.

## **POA ANNUA CONVERSION/RENOVATION**

Lawn Primo F can be applied to existing turf infested with stands of *Poa annua* as part of an overseeding/renovation program. Such an application allows better germination and seeding growth of more desirable turf. Lawn Primo F, in conjunction with the use of appropriate cultural practices that help to ensure the vigor and growth of new seedlings, will also result in fewer clippings and thus, less maintenance traffic on new seedlings. Since Lawn Primo F is foliarly absorbed, seed germination is not affected. Apply Lawn Primo F 1-5 days before seeding; and before verticutting, scalping, spiking, or other similar operations.

Temporary initial discoloration is possible with aggressive application rates of Lawn Primo F to turf with *Poa annua*. Lawn Primo F applications the following spring should use the upper end rate for the turf type and setting listed in the Application Rate Table. Actual conversion success will also depend on growing conditions, fertilization, rainfall, and other agronomic and environmental conditions.

#### **BERMUDAGRASS OVERSEEDING**

An application of Lawn Primo F to bermudagrass will enhance the establishment of cool-season turfgrasses. Lawn Primo F, in conjunction with the use of cultural practices that help ensure new seedling vigor and growth, will also result in fewer clippings and less maintenance traffic on new seedlings. Lawn Primo F is foliarly absorbed, so germination and seedling growth is not affected.

Apply Lawn Primo F before verticutting, scalping, spiking, or other similar operations to the bermudagrass. Apply Lawn Primo F 1-5 days before seeding.

Temporary initial discoloration is possible with aggressive application rates of Lawn Primo F. Use normal seeding rates for your area and turf setting (lawn, fairway, etc.). Actual overseeding success will also depend on growing conditions, fertilization, rainfall,

and other agronomic and environmental conditions. For maintenance application, see the Application Rate Table.

**Notes:** (1) Do not apply to bare ground since Lawn Primo F is foliarly absorbed. (2) Areas treated with Lawn Primo F should continue to receive regular maintenance practices, including irrigation, fertilization, and weed, disease, and insect control when necessary and as recommended for quality turf. Since some herbicides can injure turf, herbicide application within 24 hours of applying this product should first be tested on a small scale before widespread use. (3) Lawn Primo F may cause temporary yellowing. To minimize yellowing and to enhance the green color of turf, apply readily available nitrogen at 0.20-0.50 lb. of nitrogen per 1,000 square feet. If desirable, recommended rates of iron can also be used. (4) Full growth regulation by Lawn Primo F begins at about 3-5 days after application.

**Table 1. Recommended Application Rates** 

Lawn Primo F Granular Application Rates 1,2

				awn Prim					68							
	Residential and Commercial Turt			Golf Course Fairways (cut at 0.5 inch or less)					ourse		Edging/Banding <sup>4</sup>					
							Greens				<u>.</u>					
	Low	Rate	High	Rate	Low	Rate	High	Rate	Low	Rate	High	Rate	Low F	Rate	High	Rate
	lb.	Њ	lb.	lb.	lb.	ib.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
	a.i./A	Primo/	a.i./A	Primo/1	a.l./A	Primo	a.l./A	Primo	a.i./A	Primo	a.i./A	Primo	a.i./A	Primo/	a.i./A	Primo/
		1000		000 sq.		/1000		/1000		/1000		/1000	1	1000		1000
,		sq. ft.		ft.		sq. ft.		sq. ft.		sq. ft.		sq. ft.		sq. ft.		sq. ft.
Cool-Season'																
Bentgrass	0.26	3.5	0.34	4.6	0.09	1.2	0.12	1.6	0.05	0.7	0.07	0.9	0.34	4.6	0.44	5.9
Fescue, Red	0.26	3.5	0.34	4.6									0.34	4.6	0.44	5.9
Fescue, Tall (KY-31)	0.34	4.6	0.44	5.9									0.34	4.6	0.44	5.9
Fescue, Tall (Turf Types)	0.26	3.5	0.34	4.6									0.34	4.6	0.44	5.9
Kentucky Bluegrass	0.26	3.5	0.34	4.6	0.09	1.2	0.12	1.6		<u> </u>			0.26	3.5	0.34	4.6
Mixture (Bentgrass/Poa annua)					0.09	1.25	0.12	1.6	0.05	0.7	0.07	0.9				
Mixture (K. Bluegrass/Fescue, Ryegrass)	0.26	3.5	0.34	4.6												
Mixture (K. Bluegrass/Ryegrass/Poa annua)					0.17	2.35	0.26	3.5								
Ryegrass, Annual	0.34	4.6	0.44	5.9									0.34	4.6	0.44	5.9
Ryegrass, Perennial	0.34	4.6	0.44	5.9	0.17	2.3	0.26	3.5					0.34	4.6	0.44	5.9
Warm-Season®																
Bahiagrass	0.34	4.6	0.44	5.9									0.34-0.68	4.6-9.2	0.44-0.88	5.9-
																11.9
Bermudagrass <sup>5</sup>																
Bermudagrass, Common	0.26	3.5	0.34	4.6	0.09	1.2	0.12	1.6					0.34-0.68	4.6-9.2	0.44-0.88	5.9-
					1		_								l	11.9
Bermudagrass, Other Hybrids	0.09	1.2	0.12	16	0.09	1.2	0.09	1.2					0.17-0.26	2.3-3.5	0.26-0.34	3.5-4.6
Bermudagrass, Tifdwarf	0.07	0.9	0.09	1.2	0.07	0.9	0.09	1.2	0.02	0.3	0.03	0.4	0.17-0.26	2.3-3.5	0.26-0.34	3.5-4.6
Bermudagrass, Tifgreen (328)	0.09	1.2	0.12	1.6	0.07	0.9	0.09	1.2	0.05	0.7	0.07	0.9	0.26	3.5	0.34	4.6
Bermudagrass, Tifway (419)	0.13	1.8	0.17	2.3	0.09	1.2	0.12	1.6					0.26	3.5	0.34	4.6
Buffalograss	0.34	4.6	0.44	5.9									0.34	4.6	0.44	5.9
Carpetgrass	0.09-0.14	1.2-1.6	0.12-0.18	1.6-2.4									0.17	2.3	0.26	3.5
Centipedegrass	0.17	2.3	0.26	3.5									0.34	4.6	0.44	5.9
Kikuyugrass	0.10-0.17	1.4-2.3	0.13-0.22	1.8-3.0	0.10	1.4	0.13	1.6					0.34	4.6	0.44	5.9
St. Augustinegrass	0.09-0.13	1.2-1.8	0.12-0.17	1.6-2.3									0.34-0.68	4.6-9.2	0.44-0.88	5.9-
•	l		<u> </u>													11.9
St. Augustinegrass, Texas Common	0.09	1.2	0.12	1.6											0.26	3.5
Zoysiagrass	0.09	1.2	0.12	1.6	0.05	0.7	0.07	0.9					0.26	3.5	0.34	4.6

<sup>1</sup> These rates should provide 50% suppression of turf growth under good growing conditions for 4 weeks with minimal yellowing

<sup>&</sup>lt;sup>2</sup>Seedheads: At rates equal to or higher than the rates below, Lawn Primo F provides seedhead suppression of hybrid bermudagrass, and partial seedhead suppression of annual bluegrass, bahiagrass, buffalograss, carpetgrass, common bermudagrass, Kentucky bluegrass, and tall fescue. Lawn Primo F must be applied prior to seedhead formation.

<sup>3</sup>Including, but not limited to, home lawns, parks, recreation areas, golf course roughs, cemeteries, business sites, and sports fields.

<sup>&</sup>lt;sup>4</sup>For Poa annua conversion/renovation, where temporary discoloration can be tolerated, 1.5 times this rate may be applied. Repeat applications of Lawn Primo F may be made as soon as the turf resumes growth or more suppression is desired.

<sup>&</sup>lt;sup>5</sup>Where yellowing of *Poa annua* is a concern, use half this rate and apply more frequently.

Bermudagrass overseeding preparation: (3.0 lbs. Primo/1000 sq. ft. (0.22 lb. a.i./A)) to (3.8 lbs. Primo/1000 sq. ft. (0.28 lb. a.i./A))

Northern "Cool-Season" Turf. The best time to apply is in the Spring, beginning mid April through early May. Best growth regulation begins 3-5 days after the first application. Wait four weeks between any subsequent applications, and discontinue use before the onset of hot weather when the grass growth normally slows down on its own. Applications in the Fall can be used, again every four weeks until the grass growth normally slows down with the onset of cool weather.

<sup>&</sup>lt;sup>8</sup>Southern "Warm-Season" Turf: The best time to apply is Spring through Fall, beginning about one month after grass breaks dormancy. Wait four weeks before making subsequent applications as desired, discontinuing use with the onset of cooler weather, about one month before turf goes dormant.

#### **USE PRECAUTIONS**

Be sure the lawn has adequate fertility before using Lawn Primo F. For best results, avoid excessive traffic on the treated area for 24 hours following application, do no water Lawn Primo F in, and avoid application just before a rainfall. Avoid applications when grass is under stress or enters dormancy from heat or drought to prevent yellowing. Do not graze treated areas or feed clippings to livestock.

Notice to Users: Plant tolerances to Lawn Primo F have been found to be acceptable for the grasses listed on this label. Due to the large number of species and cultivars it is impossible to test everyone for tolerance to Lawn Primo F. Neither the manufacturer nor the seller has determined whether or not Lawn Primo F can be used safely on grasses not specified on this label. The professional user should determine if Lawn Primo F can be used safely prior to commercial use. Before using Lawn Primo F for grasses not listed in the application table, test Lawn Primo F on a small scale first. Apply the lower recommended rate for the turf setting (Lawn, fairway, etc.) and evaluate for phytotoxicity and growth inhibition prior to widespread use.

#### SUGGESTED SPREADER SETTINGS

(Available at Final Printing)

Note: The above spreader settings were established using standard equipment available from the spreader manufacturer at swath widths and speeds typically used within the industry. It is recommended that all spreader equipment be calibrated at the time of application to achieve the desired application rate.

Primo® and the Syngenta logo are trademarks of a Syngenta Group Company

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For non-emergency (e.g., current product information) call Syngenta Crop Protection at 1-800-334-9481.

SyngentaCrop Protection, Inc. Greensboro, North Carolina 27409 www.syngenta-us.com

SCP

(LABELS-L – LAWN-PRIMO-F-COMMERCIAL) – ccg – 1/14/00 LAWN-PRIMO-F-COMMERCIALdraft aa 3-31-04 LAWN-PRIMO-F-COMMERCIALdraft clean aa 4-22-04 (with edits from SC 4/13,21/04) 000100-00931.20040512.Commercial First Aid Amend.doc 000100-00931.20040512.Commercial First Aid Amend.pdf

## For Homeowner Use Only

## (FRONT PANEL)

# Lawn Primo® F For Turf Growth Management

Active Ingredient:	
trinexapac-ethyl (CAS No. 95266-40-3)	
-4-(cycopropyl-a-hydroxy-methylene)-3-5-dioxo-	
cyclohexanecarboxylic acid ethyl ester	0.17%
Other Ingredients:	99.83%
Total:	100.00%

## KEEP OUT OF REACH OF CHILDREN.

#### **CAUTION**

See back panel for additional precautionary statements.

EPA Reg. No. 100-931
EPA Est. No.

SCP

Treats up to \_\_\_\_\_sq. ft.

\_\_\_pounds
Net Weight

ACCEPTED with COMMENTS in EPA Letter Detect

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

100-931

## (BACK PANEL)

# Lawn Primo® F For Turf Growth Management

Guarantee	d Analysis
Total Nitrogen (N)	8.0%
Available Phosphate (P205)	1.0%
Soluble Potash (K20)	
Plant Nutrients Derived From: Ammonium P	

## KEEP OUT OF REACH OF CHILDREN.

## **CAUTION**

Treats up to	sq. ft.
pound Net Weight	ds



	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					
lf on skin or	Take off contaminated clothing.					
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.					
	Call a poison control center or doctor for treatment advice.					
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>					
	Have a person sip a glass of water if able to swallow.					
	Do not induce vomiting unless told to do so by a poison control center or doctor.					
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>					
If inhaled	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 treatment advice					
Have the produ	Have the product container or label with you when calling a poison control center or					
doctor, or going for treatment.						
	HOT LINE NUMBER					
	For 24 Hour Medical Emergency Assistance (Human or Animal) or					
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),						
Call						
1-800-888-8372						

## **PRECAUTIONARY STATEMENTS**

Hazards to Humans and Domestic Animals Causes eye irritation. Do not get in eyes. Harmful is swallowed or absorbed through skin. Avoid contact with skin or clothing.

#### **Environmental Hazards**

Do not apply directly to water. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater. Do not apply when weather conditions favor drift from treated areas.

## 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 should be followed carefully. It is impossible to eliminate all risks inherently 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 SYNGENTA CROP PROTECTION, INC. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## **DIRECTIONS FOR USE**

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

Lawn Primo F should be used only in accordance with recommendations on this label or in separately published Syngenta supplemental labeling recommendations for this product.

Read entire label before using this product.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN UNEVEN GROWTH REDUCTION OR SEVERELY STUNTED TURF.

For use on home lawns. Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

### STORAGE AND DISPOSAL

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

## **Pesticide Storage**

Store in a cool, dry place. Keep container closed and away from food, feedstuffs, and domestic water supplies.

## **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide 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**

Do not reuse container. Then dispose of container in a sanitary landfill or by other alternatives if allowed by State or local authorities.

#### **GENERAL INFORMATION**

Lawn Primo F is a unique turf growth management product that allows the homeowner to feed their lawn to enhance its beauty while slowing the growth of grass leaves,

actually reducing lawn-mowing effort by half for a period of about four weeks. This is possible because of the special combination of fertilizer ingredients and growth regulator which provide nutrition, without causing runaway growth. Lawn Primo F contains:

- Nitrogen, to stimulate turf density and greening
- Phosphorous, to help build a stronger root system
- · Potassium, for stem and leaf strength and drought resistance
- Iron, for greening and to prevent deficiency

Used as directed, the fertilizer in Lawn Primo F will help develop strong turf, resistant to stress from traffic, disease, and environmental extremes. At the same time, the homeowner will save about half the mowing time and effort normally expended when using the fertilizer alone, due to the growth regulation effect of the active ingredient.

A quality lawn occurs when the grass is actively growing, but there are times and places where a high growth rate is unwanted. The use of Lawn Primo F can be a valuable tool for managing the growth of the homeowner's lawn. Some examples are shown below:

- During times of undesirable heavy grass growth, such as in the Spring, when frequent rains limit the opportunity for mowing
- · When away from home for a long period
- · On steeply sloped ground
- When mowing is prohibited because of air pollution restrictions
- As a "green edger," in lawn border areas
- Around mowing obstacles, such as fences, trees, shrubs, ornamentals and flowerbeds

The active ingredient in Lawn Primo F is time-tested, having been extensively used on golf courses and by commercial lawn service companies. The proper use of Lawn Primo F offers the following benefits:

- About half as much clipping volume to collect and recycle
- Longer interval between mowings, or quicker and easier mowings
- Redirects grass growth energy into roots and shoots, frequently improving turf density and durability
- Frequently reduces watering requirements and increases green color
- Will not harm neighboring plants
- Seed germination is not affected
- Does not kill the grass like other chemical edger products
- Watering in is not required

The amount of Lawn Primo F needed to use depends on the homeowner's region and grass type. Be sure to use the proper rate. See the use rate charts below. Multiple

applications may be made throughout the growing season, but do not exceed a total of 33.8 lbs. per 1,000 sq. ft. (2.5 lbs. a.i./A) per year.

## HOW TO APPLY LAWN PRIMO F

For best results, apply the product to grass which is wet from dew or sprinkling, do not water Lawn Primo F in, and avoid application just before a rainfall. For best results, be sure the lawn has adequate fertility when Lawn Primo F is applied.

"Green Edging:" This use provides the greatest value, since a small amount of product produces a great deal of time and labor savings. In case of mixed or unknown grass types, this is also a good way to try the product on the lawn. If any temporary objectionable discoloration occurs, usually lasting only one or two weeks, use at the next lower rate on the following application, and re-evaluate the results.

Spread the product to cover hard-to-mow borderline areas around buildings, sidewalks, drives, fences, trees and ornamental beds, or on steeply sloped areas. Unlike other chemical edger products, Lawn Primo F does not kill grass or ornamental plantings, leaving unsightly brown areas.

When using a shaker can or other device designed for edging application, apply the product evenly to cover the turf in a band the desired width wherever growth regulation is desired, such as around sidewalks, curbs, driveways, fences, buildings, or other narrow, hard-to-mow areas.

Overall lawn treatment: On soils with adequate fertility (see fertilization section) and where the homeowner is sure of the type of grass in your lawn, this is the best way to use Lawn Primo F. Apply product evenly, using a properly calibrated granular fertilizer spreader which will uniformly distribute the product over the target area. Avoid skips and excessive overapplications as poor growth regulation or turfgrass injury may occur.

Use on Northern, "Cool-Season" Turf: The best time to apply is in the Spring, beginning mid April through early May, or when daily highs begin to approach or exceed 60° F for several consecutive days. Best growth regulation begins about 3-5 days after the first application. Wait four weeks between any subsequent applications, and discontinue use before the onset of hot weather when the grass growth rate normally slows down on its own, or when daily highs exceed 75° F for several consecutive days. Applications in the late Summer and Fall can be used, commencing as soon as the weather turns cooler, with daily highs below 75° F for several consecutive days. Apply as desired every four weeks until the grass growth normally slows down with the onset of cool weather. An ongoing turf management program of Lawn Primo F and fertilizer will help to enhance desirable results, such as turf density, deep green color, and vigor.

## Application Rates for Northern, "Cool-Season" Turfs:

Turf Type	Overall Lawn Application Rate Ibs. Lawn Primo F per 1000 sq. ft.	Green Edging Application Rates' Ibs. Lawn Primo F per 1000 sq. ft.
Kentucky Bluegrass Fine (Red) Fescue Turf Type Tall Fescues Bluegrass/Fescue/ Ryegrass Mixtures Bentgrass (cut at 0.5 inch or higher)	3.5 (0.26 lb. a.i./A) to 4.6 (0.34 lb. a.i./A)	4.6 (0.34 lb. a.i./A) to 5.9 (0.44 lb. a.i./A)
Kentucky-31 Tall Fescue	4.6 (0.34 lb. a.i./A) to 5.5 (0.41 lb. a.i./A)	4.6 (0.34 lb. a.i./A) to 5.9 (0.44 lb. a.i./A)

<u>Use on Southern, "Warm-Season" Turf</u>: The best time to apply is Spring through Fall, beginning about one month after grass breaks dormancy. Best growth regulation begins about 3-5 days after the first application. Wait four weeks before making subsequent applications as desired, discontinuing use with the onset of cooler weather in the Fall, or about one month before turf begins to go dormant. Warm-Season grasses slow their growth rate when daily temperature highs fall below 80° F for several consecutive days.

## Application Rates for Southern, "Warm-Season" Turf:

Turf Type	Overall Lawn Application Rate lbs. Lawn Primo F per 1000 sq. ft.	"Green Edging" Application Rates lbs. Lawn Primo, F per 1000 sq. ft.
Tifway Bermudagrass	1.8 (0.13 lb. a.i./A) to 2.3 (0.17 lb. a.i./A)	3.4 (0.25 lb. a.i./A) to 4.6 (0.34 lb. a.i./A)
Tifdwarf & other Hybrid grasses	1.2 (0.09 lb. a.i./A) to 1.5 (0.11 lb. a.i./A)	2.3 (0.17 lb. a.i./A) to 3.5 (0.26 lb. a.i./A) or 3.4 (0.25 lb. AMA) to 4.6 (0.34 lb. a.i./A)
Zoysiagrass	1.2 (0.09 lb. a.i./A) to 1.5 (0.11 lb. a.i./A)	3.4 (0.25 lb. a.i./A) to 4.6 (0.34 lb. a.i./)
Carpetgrass	2.3 (0.17 lb. a.i./A) to 3.5 (0.26 lb. a.i./A)	2.3 (0.17 lb. a.i./A) to 3.5. (0.26 lb. a.i./A)
St. Augustine	2.3 (0.17 lb. a.i./A) to 3.5 (0.26 lb. a.i./A)	4.6 (0.34 lb. a.i./A) to 5.9 (0.44 lb. a.i./A) or 9.2 (0.68 lb. a.i./A) to 11.9 (0.88 lb. a.i./A)
Kikuyugrass, Centipedegrass	2.3 (0.17 lb. a.i./A) to 3.5 (0.26 lb. a.i./A)	4.6 (0.34 lb. a.i./A) to 5.9 (0.44 lb. a.i./A)
Common Bermudagrass	3.5 (0.26 lb. a.i./A) to 4.6 (0.34 lb. a.i./A)	4.6 (0.34 lb. a.i./A) to 5.9 (0.44 lb. a.i./A) or 9.2 (0.68 lb. a.i./A) to 11.9 (0.88 lb. a.i./A)
Bahiagrass	4.6 (0.34 lb. a.i./A) to 5.5 (0.41 lb. a.i./A)	4.6 (0.34 lb. a.i./A) to 5.9 (0.44 lb. a.i./A) or 9.2 (0.68 lb. a.i./A) to 11.9 (0.88 lb. a.i./A)
Buffalograss	4.6 (0.34 lb. a.i./A) to 5.5 (0.41 lb. a.i./A)	4.6 (0.34 lb. a.i./A) to 5.9 (0.44 lb. a.i./A)

Use the higher rate to reduce the growth of the turfgrass into adjacent areas

### **USE PRECAUTIONS**

Be sure the lawn has adequate fertility before using Lawn Primo F. See FERTILIZATION section (Give location of this section) for general fertilization quidelines. For best results:

- 1. Avoid excessive traffic on the treated area for 24 hours following application.
- 2. To prevent yellowing, avoid applying when grass is under stress or enters dormancy from heat or drought.
- 3. To avoid removing product from lawn, do not mow 24 hours after applying Lawn Primo F.
- 4. To avoid potential turfgrass injury, do not mow 4 hours before applying Lawn Primo F.

**Notes:** Do not apply this product to grasses not listed on the label. Do not graze treated areas or feed clippings to livestock.

Generally, Lawn Primo F provides more suppression when turfgrasses are mowed at lowering mowing heights. Do not mow so low as to "scalp" the lawn, exposing lighter-colored crown tissue, and do not remove more than about 1/3 of the leaf height. Raise



the mowing height to about 1.5 inches or more (for most lawns) when turf undergoes stress or enters dormancy due to heat or drought.

#### SUGGESTED SPREADER SETTINGS

(Available at Final Printing)

**Broadcast Spreaders:** For best results, apply in a circular path starting on the outside and working toward the center. A little overlap of product will ensure complete coverage.

<u>Drop Spreaders:</u> First, apply 2 border strips along the edge of each end of the lawn. Then apply product along the length of the lawn, overlapping slightly and shutting off the spreader before turning as you reach the edge of the border strips.

Important: It is important to follow the directions as indicated on this quality lawn care product as over-application may cause injury to the lawn. Spreader settings are approximate. Differences may occur due to condition of spreader, speed at which applied, and roughness of area treated. Be sure to check spreader at the beginning of the application; adjust spread if necessary. Do not hand spread.

#### **FERTILIZATION**

A lawn needs adequate fertilizer to maintain its best vigor, density and appearance, whether or not Lawn Primo F is used. Despite the frequent enhancement of turf quality, Lawn Primo F does not completely replace fertilizer. Use a complete, good quality lawn fertilizer no less than ten days prior to any application of Lawn Primo F. Using fertilizer with supplemental iron is recommended.

The following are general fertilization schedules for most lawn types in the two major regions of the U.S.

**Note:** To determine pounds N (nitrogen) applied, simply take the percentage of N (the first number of the N-P-K guarantee) times the pounds applied. For example, 4 pounds per 1,000 square feet of a 25-5-10 provides 1.0 pound of N per 1,000 square feet. Consult your state cooperative extension service for recommendations for your particular grass, soil type, and location.

Northern, "Cool-Season" Turf: Apply at 0.25 to 0.75 pound N per 1,000 square feet every 4-6 weeks, using higher rates with the longer intervals. Use light rates in the spring and summer, increasing the rates going into the Fall. When surface soil temperatures drop to about 50° F for several consecutive days, and after the use of Lawn Primo F is discontinued (see directions) do a late Fall feeding of 1.0 to 1.5 pounds N per 1,000 square feet. The Fall application is the most important feeding of the year, since it builds the root system instead of causing excessive foliar growth at that time. The overall fertility program should provide about 3 to 5 pounds of N, per 1,000 square

feet during the growing season. Adequate potassium (K), at least about half as much as the nitrogen applied, is generally advisable, as is supplemental iron.

Southern, "Warm-Season" Turf: In Spring, as turf comes out of dormancy, apply at 0.50 to 0.75 pounds N per 1,000 square feet for the first month, before beginning the use of Lawn Primo F (see directions). Then, while Lawn Primo F is used, apply 0.75 to 1.25 pounds N per 1,000 square feet per month until the last month before dormancy, when the use of Lawn Primo F is discontinued (see directions). Reduce to 0.5 to 1.0 pound N per 1,000 square feet for the last application before dormancy, or until spring where dormancy does not occur. Applications may be made every 4-6 weeks, using higher rates with the longer intervals. The overall annual program should provide about 5 to 8 pounds of N per 1,000 square feet during the growing season. Adequate potassium (K), at least about half as much as the total nitrogen applied, is generally advisable, as is supplemental iron. Especially sandy soils typically require the higher rates for acceptable quality.

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