MAY | 4 | 1998

Dawn L. Walters The Andersons, Inc. P.O. Box 119 Maumee, OH 43537

Dear Ms. Walters:

Subject: Revised Labeling - Additional Directions

for Air Temperature and Turf Dampness

Lawn Primo F

EPA Registration No. 9198-151

Your Submission Dated February 12, 1998

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following provisions:

- 1) Add a reentry restriction to the commercial version of the labeling to read "Do not enter or allow others to enter the treated area until dusts have settled. If incorporation is accomplished by watering-in, do not enter or allow others to enter the treated area until the surface is dry after the watering-in."
- 2) Add a reentry restriction to the homeowner version of the labeling to read "Do not allow people or pets to enter the treated area until dusts have settled. If watering-in is required after the application, do not enter or allow others to enter the treated area (except those involved in the watering) until the watering-in is complete and the surface is dry."
- 3) The second paragraph of the Use Precautions section of the commercial version of the labeling incorrectly refers to this product as "Lawn Primo G". This typographical error should be corrected so that it reads "Lawn Primo F".

DK:305	5-7546!48	3/PM23	c	ONCURRENCES	·	 	·
SYMBOL -	7505C						
SURNAME >	D.KENNY						
DATE -	5/14/98						

EPA Form 1320-1 (12-70)

A stamped copy is enclosed for your records. Please submit one (1) final printed copy for both the commercial version and the homeowner version of the referenced label, incorporating the above changes, before releasing the product for shipment.

Sincerely yours,

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

Enclosure

9198-151C Page 1 of 8

For Commercial Use Only
(The above is for internal/split labeling clarification only, it will not appear on the final printed label)

(FRONT PANEL)

LAWN PRIMO F

ACTIVE INGREDIENT:	
4- (cylcopropyl-a-hydroxy-methylene)-3,5-dioxo-cyclohexanecarboxylic acid ethyl este	
INERT INGREDIENTS:	{99.99% - 99.00%}*
Total	100.00%
Primo™ is a registered trademark of Novartis Crop Protection, Inc.	
*Note: The level of active ingredient and inert ingredients will vary within the range specified by the Confide	ential Statements of Formula.
KEEP OUT OF REACH OF CHILDREN	
CAUTION	
SEE BACK PANEL FOR ADDITIONAL PRECAUTIONS	
NET WEIGHTLBS.	ACCEPTED with COMMENTS In EPA Letter Dated
TREATS UP TOSQ. FT.	MAY 1 4 1998
	Under the Federal Insecticide Fundicide, and Rodenticide A as amended, for the pesticide registered under EPA Reg. No.

EPA Reg. No. 9198-151

EPA Est. No. 9198-OH-1

9198-151C Page 2 of 8

For Commercial Use Only

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(BACK PANEL)

Net Weight Lbs.

Treats Up To_____ Sq. Ft.

LAWN PRIMO F

Guaranteed Analysis	
Total Nitrogen (N)	1%
Plant Nutrients Derived From: Ammonium Phosphate, Muriate of Potash, Urea	

KEEP OUT OF REACH OF CHILDREN

CAUTION

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.

STATEMENT OF PRACTICAL TREATMENT

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water. Get medical attention.

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

If on skin: Wash with plenty of soap and water. Call a physician if irritation persists.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. Do not apply when weather conditions favor drift from treated areas.

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DIRECTIONS FOR USE

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

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.

Do not apply this product through any type of irrigation system.

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 the 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 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

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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.

Tests have shown that Perennial Ryegrass and St. Augustine turts must be damp at the time of application for best results.

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 {XX.X} pounds per 1000 sq. ft. (2.5 ib. 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 damp from dew or irrigation and when the weather is warm (air temperature at least in the 50°s F).

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 overapplications 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.

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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 0.2-0.5 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.

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APPLICATION RATE TABLE

(See attached Table 1)

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 G 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 G. Neither the manufacturer nor the seller has determined whether or not Lawn Primo G can be used safely on grasses not specified on this label. The professional user should determine if Lawn Primo G can be used safely prior to commercial use. Before using Lawn Primo G for grasses not listed in the application table, test Lawn Primo G 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.

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 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 incineration, or, if allowed by State or local authorities, by burning. If burned, stay out of smoke.

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MANUFACTURERS STATEMENT

This product conforms to the ingredient statement on the label. Manufacturer's directions regarding use of this product are based upon tests believed to be reliable. All statements made concerning this product apply only when used as directed under normal use conditions. FOLLOW DIRECTIONS CAREFULLY. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the manufacturer. Buyer assumes all risks of use, storage and handling of this product.

THIS PRODUCT IS SOLD AS IS. MANUFACTURER MAKES NO WARRANTIES, EXPRESS OR IMPLIED. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

> Manufactured By: THE ANDERSONS LAWN FERTILIZER DIVISION D/B/A FREE FLOW FERTILIZER P.O. BOX 119 MAUMEE, OH 43537

Date Printed:

02/11/98

Date Approved: 5/20/97

Supersedes:

new

Label Change:

add application info for perennial ryegrass & st. augustine (wet)/change 'wet' to 'damp'

under "Application Timing"

Filename:

9198151c.doc

Lawn Primo F Granular Application Rates 1,2

	<u> </u>	Resider	Golf Course Fairways			Golf Course				Edging/Banding4						
	Commercial Turf ³				(cut at .5 inch or less)			Greens								
	Low Rate		High Rate		Low Rate		High Rate		Low Rate		High Rate		Low Rate		High Rate	
	lb.	lb.	lb.	lb.	lb.	lb.	ib.	ib.	lb.	lb.	lb.	lb.	lb.	lb.	lb,	lb.
	al/A	Primo	al/A	Primo	al/A	Primo	al/A	Primo	al/A	Primo	ai/A	Primo	ai/A	Primo	al/A	Primo
<u> </u>						<u> </u>	1					ļ 			<u> </u>	
Cool-Season ⁷																
Bentgrass	.26	X.X	.34	X.X	.09	X.X	.12	X.X	.05	X.X	.07	X.X	.34	X.X	.44	X.X
Fescue, Red	.26	X.X	.34	X.X									.34	X.X	.44	X.X
Fescue, Tall (Ky-31)	.34	X.X	.44	X.X									.34	X.X	.44	X.X
Fescue, Tall (Turf Types)	.26	X,X	.34	X.X									.34	X.X	.44	X.X
Kentucky Bluegrass	.26	X.X	.34	X.X	.09	X.X	.12	X.X					.26	X.X	.34	X.X
Mixture (Bentgrass/Poa annua)					.09	X.X ⁵	.12	X.X	.05	X.X ⁵	.07	X.X				
Mixture (K. Bluegrass/Fescue, Ryegrass)	.26	X.X	.34	X.X												
Mixture (K. Bluegrass/Ryegrass/Poa annua)					.17	X.X ⁵	,26	X.X								
Ryegrass, Annual	.34	X.X	.44	X.X									.34	X.X	.44	X.X
Ryegrass, Perennial ⁹	.34	X.X	.44	X.X	.17	X.X	,26	X.X					.34	X.X	.44	X.X
Warm-Season ⁶																
Bahlagrass	.34	X.X	.44	X.X									.3468	X.X - X.X	.4488	X.X - X.X
Bermudagrass ⁶																
Bermudagrass, Common	.26	X.X	.34	X.X	.09	X.X	.12	X.X					.3468	X.X - X.X	.4488	X.X - X.X
Bermudagrass, Olher Hybrids	.09	X.X	.12	X.X	.07	X.X	.09	X.X					.1726	X.X - X.X	.2634	X.X - X.X
Bermudagrass, Tifdwarf	.07	X.X	.09	X.X	.07	X.X	.09	X.X	.02	X.X	.03	X.X	.1726	X.X - X.X	.2634	X.X - X.X
Bermudagrass, Tifgreen (328)	.09	X.X	.12	X.X	.07	X.X	,09	X.X	.05	X.X	.07	X.X	.26	X.X	.34	X.X
Bermudagrass, Tifway (419)	.13	X.X	.17	X.X	.09	X.X	.12	X.X				i	.26	X.X	.34	X.X
Buffalograss	,34	X,X	.44	X.X				X.X					.34	X.X	.44	X.X
Carpetgrass	.0914	X.X - X.X	.1218	X.X - X.X									.17	X.X	.26	X.X
Cenlipedegrass	.17	X.X	.26	X.X									.34	X.X	.44	X.X
Kikuyugrass	.1017	X.X - X.X	.1322	X.X - X.X	.10	X.X	.13	X.X					.34	X.X	44	X.X
St. Augustinegrass ⁹	.0913	X.X - X.X	.1217	X.X - X.X									.3468	X.X - X.X	.4488	X.X - X.X
St. Augustinegrass ⁹ , Texas Common	.09	X.X	.12	X.X											.26	X.X
Zoyslagrass	.09	X.X	.12	X.X	,05	X.X	.07	X.X	[.26	X.X	.34	X.X

¹These rates should provide 50% supression of turf growth under good growing conditions for 4 weeks with minimal yellowing

²Seedheads: At rates equal to or higher than the rates below, Lawn Primo F provides seedhead suppression of hybrid bermudagrass, and partial southend suppression of annual bluograss, bahlagrass, buffalograss, carpotgrass, common bermuda grass, Kontucky bluograss, and tall foscuo. Lawn Primo F must be applied prior to seedhead formation.

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

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.

^{*}Where yellowing of poe annua is a concern, use half this rate and apply more frequently.

⁶Bermudagrass overseeding preparation: {X.X (.22 lb Al/A)} to {X.X (.28 lb Al/A)}

⁷Northern "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 rate 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.

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.

For past results these turn types must be wet when product is applied with the