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100-752

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US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (75-767) WASHINGTON, DC 20460	EPA REGISTRATION NO.	DATE OF ISSUANCE
	100-752	JUN 2, 1994
	TERM OF ISSUANCE	
NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> REGISTRATION <input type="checkbox"/> REREГИSTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)	CONDITIONS EXPIRES MARCH 30, 1995	
	NAME OF PESTICIDE PRODUCT	

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Ciba Plant Protection
 Ciba-Geigy Corporation
 P.O. BOX 18300
 Greensboro, NC 27419-8300

NOTE: Changes in labeling formula 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 U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this 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 conditionally registered in accordance with FIFRA section 6(c)(7)(A) provided that you:

1. Add the phrase "EPA registration no. 100-752" to the label before you release the product for shipment.
2. Replace the dermal sensitization study, if the study supplement submitted on April 22, 1994 is found to be inadequate data to support this registration.
3. Replace the generic data submitted with your letter of February 7, 1994, if it is determined to be inadequate for support of EPA registration no. 100-729, 100-727 and this registration.
4. Submit five (5) copies of the final printed labeling before you release the product for shipment.

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 the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Joanne I. Miller
 Product Manager (23)
 Fungicide-Herbicide Branch
 Registration Division (75050)

enclosure

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL: *Joanne I. Miller* DATE: JUN 22 1994

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Primo® WSB

ACCEPTED
with COMMENTS
In EPA Letter Dated
JUN 22 1994

FOR TURF GROWTH MANAGEMENT

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
600-752

For managing growth and quality of
warm- and cool-season turfgrasses.

Active Ingredient:	
4-(cyclopropyl- α -hydroxy-methylene)-	
3,5-dioxo-cyclohexanecarboxylic acid ethyl ester	25%
Inert Ingredients:	75%
Total:	100%

Primo WSB is a wettable powder
packaged in a water soluble bag.

One Ounce Bag
Net Weight

CAUTION

See additional precautionary statements
and directions for use inside booklet.

This outer protective container contains Primo WSB in an inner
water soluble bag. Entire inner bag and contents dissolve in
water. After opening outer container, immediately dump entire
unopened inner bag into the partially filled sprayer or mix
tank. Do not handle the soluble bag or expose it to moisture,
since this may cause rupturing. Using partial bags of Primo WSB
voids any warranty by Ciba-Geigy on its safety and efficacy.

CGA _____ - DRAFT

[GANNONC.LABELP]PRIMOWSB - 6/6/94

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DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT. Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product. If terms are not acceptable, return the unopened product container at once.

Conditions of Sale and Warranty

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Turf injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Ciba-Geigy or the Seller. All such risks shall be assumed by the buyer.

Ciba-Geigy warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. Ciba-Geigy makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Ciba-Geigy or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Ciba-Geigy and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Ciba-Geigy.

DIRECTIONS FOR USE

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

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 responsible for pesticide regulation.

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 (PPE) 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 treated areas without protective clothing until sprays have dried.

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 treated areas without protective clothing until sprays have dried.

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

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GENERAL INFORMATION

Primo WSB for turf growth management reduces the frequency of mowing and the amount of grass clippings by reducing the growth of warm- and cool-season turfgrasses. Other benefits such as increased turf density, increased color and increased turf density and increased turf quality are frequently observed after Primo WSB applications.

Primo WSB can be applied to well-maintained, quality turfgrass areas such as residential and commercial lawns, golf courses, sod farms, sports fields, cemeteries and similar areas. Primo WSB is useful in the management of difficult-to-mow areas and can be used to minimize the need for edging turfgrass along sidewalks, curbs, parking lots, driveways, flower beds, fences and around posts, storage sheds and trees.

Primo WSB reaches the growing point by foliar uptake and is rainfast from rainfall or irrigation after one hour. Watering-in is not necessary for activation.

APPLICATION INFORMATION

Environmental conditions, management, and cultural practices that affect turf growth and vigor will influence the response of the turf to Primo WSB applications. These include fertility level, moisture availability, plant vigor, height, and frequency of mowing.

The rates presented in Tables 1 and 2 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 Primo WSB. Under these conditions, Primo WSB rates may have to be increased up to 50% to provide an adequate length of control.

For extended growth suppression up to 8 weeks, where temporary discoloration can be tolerated, a maximum of twice the recommended Primo WSB rate may be applied.

Primo WSB 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.

Multiple applications can be made each growing season, but do not exceed a total of 4 x 1.0 oz. bags per 1,000 sq. ft. per year.

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Mowing

Generally, Primo WSB 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 Primo WSB not be applied 12 hours before or 4 hours after mowing to minimize any potential injury.

Application Timing

Apply Primo WSB to actively growing turf. Reduce Primo WSB rates on turf going into dormancy due to high or low temperatures or lack of moisture.

Repeat applications of Primo WSB may be made as soon as the turf resumes growth or more suppression is desired.

Equipment

Apply Primo WSB with a sprayer capable of accurate and uniform applications. Clean spray equipment thoroughly before use. Primo WSB may be applied in backpack sprayers, hand sprayers, boom sprayers, and by spraygun application devices. Rinse sprayer with clean water after use and dispose of rinsate in an approved manner.

Mixing Instructions

Primo WSB should be mixed with 0.5 to 4.0 gals. water per 1,000 sq. ft. (20 to 174 gals./A).

Prepare no more mixture than is necessary for the application to be made. Agitate thoroughly before and during application. Primo WSB may be tank-mixed with many commonly used pesticides and liquid fertilizers.

If using Primo WSB in a tank mixture, observe all directions for use, crops/sites, use rate dilutions ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate should be exceeded and the most restrictive label precautions and limitations should be followed. Primo WSB should not be mixed with any product that bears label prohibiting such mixing.

Precautions: (1) Soluble prepacks of Primo WSB must be dissolved completely in water prior to adding other tank mix partner, including micronutrients or other liquid or dry fertilizer is added to the spray solution. (2) When Primo WSB is tank mixed with Banner® 1.1EC or Bayleton® 25WP, use a compatibility agent at 3 pts./100 gallons of water. (3) When preparing a tank mixture, if more than one product is packaged in soluble prepacks, add all of those products together at once. Add any other tank mix partners after the soluble bags have dissolved.

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and the material has completely dispersed into the mix water.
(4) Primo WSB does not require the addition of a surfactant.

Backpack and Hand Sprayers (1/2-4 gals. capacity)

Primo WSB Alone: Add all of the required water to the mix tank. Drop the required number of unopened soluble prepacks of Primo WSB into the tank all at once. Allow the mixture to stand for 3-5 minutes to let the soluble package(s) dissolve. Then, vigorously shake the sealed mix tank for 30 seconds. Begin application after the pouches have dissolved and the material has completely dispersed into the mix water.

Primo WSB + Tank Mixtures: Add all of the required water to the mix tank. Drop the required number of unopened soluble prepacks of Primo WSB into the tank all at once. Allow the mixture to stand for 3-5 minutes to let the soluble package(s) dissolve. Then vigorously shake the sealed mix tank for 30 seconds. Tank mix partners may be added when the Primo WSB prepacks and their contents have dissolved and dispersed into the mix water. Shake the sealed container for 30 seconds to disperse the tank mix partners into the spray solution. Begin spraying when all of the materials have been properly mixed.

Boom & Hand Gun Sprayers: (with spray tanks having mechanical agitation)

Primo WSB Alone: Add 1/2-2/3 of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of Primo WSB prepacks into the tank all at once. Continue agitation while adding the remainder of the water. Apply spray solution after the bags have dissolved and the material has completely dispersed into a uniform mixture. Agitate during application of the resulting mixture.

Primo WSB + Tank Mixtures: Add 1/2-2/3 of the required amount of water to the spray or mixing tank. With the agitator running, drop the required number of unopened soluble prepacks of Primo WSB into the tank all at once. Continue agitation while adding the remainder of the water. Tank mix partners should only be added when: (1) the Primo WSB bags and their contents have dispersed into the mix water, and 2) after the tank mix has been filled with water. Stop agitation long enough to add the tank mix partner and then resume agitation while spraying the solution.

Dyes

An EPA-approved water-soluble dye to mark the sprayed area may be used to ensure uniform application, and to avoid skips and overlaps. Refer to the instructions that accompany the dye for proper concentrations and mixing procedures.

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Staining

Primo WSB when applied alone at normal dilution rates will not stain concrete, marble, or granite. Before using Primo WSB around other types of stone, test on a small-scale basis first.

SEEDHEAD SUPPRESSION

At rates listed in Tables 1 and 2, Primo WSB provides seedhead suppression of hybrid bermudagrass and partial seedhead suppression of bahiagrass, common bermudagrass, and tall fescue. Primo WSB must be applied prior to seedhead formation.

NOTES:

- (1) Do not apply to bare ground since Primo WSB is foliarly absorbed.
- (2) Turf treated with Primo WSB should continue to receive regular good maintenance practices including irrigation; fertilization; and weed, disease, and insect control when necessary, and as recommended for quality turf. As some herbicides may injure turf, tank mixes with Primo WSB should be tested on a small scale before widespread use.
- (3) Primo WSB may cause temporary yellowing. This usually disappears about one week after application. To minimize yellowing and to enhance the green color of turf, tank mix 1-2 oz. Sprint® 330 or recommended rates of other iron sources per 1,000 sq. ft.
- (4) Initial applications of Primo WSB may be made to greens at 1/2 the rates listed in Table 2. Higher rates may be needed to maintain efficacy for subsequent applications; however, do not exceed the standard rates in Table 2.
- (5) Turf may be mowed four hours after application of Primo WSB.

Table 1. Recommended Rates for Residential and Commercial Turf, Including but not Limited to Home Lawns, Parks, Recreation Areas, Golf Course Roughs, Cemeteries, Business Sites, Sports Fields, and Sod Farms

Turf Type	Oz./1,000 sq. ft.	Oz./A
Bahiagrass		
Growth suppression	0.50	21.8
Seedhead suppression	1.00	43.6
Zoysia	0.125	5.4
Centipede	0.25	10.9
St. Augustine		
Floritam	0.25	10.9
Raleigh, others	0.187	8.1
Bermudagrass		
Common	0.375	16.3
419	0.187	8.1
328	0.125	5.4
Tall Fescue		
Kentucky 31	0.5	21.8
Turf Types	0.375	16.3
Red Fescue	0.375	16.3
Kentucky Bluegrass	0.375	16.3
Annual Ryegrass	0.50	21.8
Perennial Ryegrass	0.50	21.8
Bentgrass (Lawn)	0.375	16.3
Mixtures		
Kentucky Bluegrass	0.375	16.3
Fescue		
Ryegrass		

*These rates should provide 50% suppression of turf growth under good growing conditions for 4 weeks with minimal yellowing.

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Table 2: Standard Rates for Golf Course Fairways
Cut at 1/2 inch or Less

Turf Type	Rate (Oz./1,000 sq. ft.)	Fl. Oz./A
Zoysia	0.062	2.7
Bermudagrass		
Common	0.125	5.4
419	0.125	5.4
328	0.100	4.4
Kentucky Bluegrass	0.125	5.4
Perennial Ryegrass	0.25	10.9
Bentgrass	0.125	5.4
Bentgrass/Poa annua	0.125	5.4

*These rates should provide 50% suppression of turf growth under good growing conditions for 4 weeks with minimal yellowing.

PERIMETER EDGING AND BANDED APPLICATIONS

Primo WSB can be applied along the perimeter of lawns, sidewalks, curbs, parking lots, driveways, posts, storage buildings, pet pens, fences, or other areas. Primo WSB can be used around trees, shrubs, flower beds, or similar areas and other border plants with no injury. Apply Primo WSB in an 8 to 12-inch band with a single nozzle sprayer.

Refer to Table 3 for recommended application rates.

Table 3. Edging/Banded Application Rates

<u>Turfgrass (varieties)</u>	<u>Standard Rate* Number of 1.0 Oz. bags per 1 gal. of water to treat up to 1,000 linear ft.**</u>
Bahagrass Common Bermudagrass St. Augustine (Florata)	1-2
Centipedegrass Tall Fescue, Red Fescue Annual and Perennial Ryegrass Bentgrass	1
Tifway Bermuda (419) Kentucky Bluegrass St. Augustine (Raleigh) Tifgreen Bermuda (328) Zoysia	1 (this should be added to 3 gals. of water and it will cover up to 3,000 linear ft.)
*Based on a 12-inch band width. **Use the higher concentration to reduce the growth of the turfgrass into adjacent areas.	
<u>Important: When calculating the number of bags to use, always round-off to the nearest number of whole bags. Do not use partial bags.</u>	

PRECAUTIONS

- (1) Do not apply Primo WSB through any type of irrigation system.
- (2) Do not graze areas or feed clippings to livestock.

STORAGE AND DISPOSAL

Storage - Store in a cool, dry place. Do not store this product under wet conditions. Handle outer container carefully to avoid breakage of inner soluble bag.

Pesticide Disposal

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

Container Disposal

Do not reuse outer container. Dispose of empty outer container in a sanitary landfill or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire or other emergency, call 1-800-888-8372, day or night.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing and breathing dust or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Statement of Practical Treatment

If on skin: Wash with plenty of soap and water. Get medical attention.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

If in eyes: Flush eyes with plenty of water. Call a physician if irritation persists.

Note to Physician

If ingested, induce emesis or lavage stomach. Treat symptomatically.

Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Engineering Control Statements

When handlers use closed systems or enclosed cabs 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.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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. Do not contaminate water when disposing of equipment wash waters. Do not apply when weather conditions favor drift from treated areas.

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Bayleton® trademark of Mobay Chemical Corporation

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Ciba Plant Protection
Ciba-Geigy Corporation
Greensboro, North Carolina 27419

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