NOV 1 0 1998

Mr. Craig Martens PBI/Gordon Corporation P.O. Box 014090 Kansas City, MO 64101

Dear Mr. Martens:

Subject:

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Conversion from MCPP to MCPP-p

EH 1143 Herbicide

EPA Registration Number: 2217-797

Your Submission Dated September 14, 1998

The Agency is conditionally approving an amendment to the registration of the above-referenced product under the authority of section 3(c)(7)(A) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Under this amendment the Agency is approving the conversion of the active ingredient mecoprop from its racemic form [2-(2-methyl-4-chlorophenoxy) propionic acid, or applicable salt thereof] to its single isomer form [(+)-R-2-(2-methyl-4-chlorophenoxy) propionic acid, or applicable salt thereof]. The revised labeling and Confidential Statement(s) of Formula submitted in support of the conversion are acceptable with the following provisions:

- 1. This acceptance is based on your certification that no changes have been made to the Confidential Statement(s) of Formula (CSF) or the product labeling other than those specified within the body of your certification statement. No other revisions are being reviewed or considered with this action.
- 2. You may sell or distribute product containing the racemic form of mecoprop and bearing the previously approved labeling for 18 months from the date of this letter.
- 3. The last accepted label for Technical MCPA Acid, EPA Reg. No. 15440-7, declares 95% active ingredient (ai). You may use existing stock with 93% ai but in order to be consistent with the label ingredient declaration, update your CSF once you begin manufacturing with the 95% product.

A copy of the revised Confidential Statement of Formula (Basic Formulation, dated 09/14/98) has been placed in the Agency's file for the subject product. This CSF supersedes all previously submitted CSFs for this product.

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TO THE RESERVE OF THE PROPERTY OF THE PROPERTY

A stamped copy of the labeling is enclosed for your records. Submit one copy of your final printed labeling before you release the product for shipment.

Sincerely yours,

James A. Tompkins
Product Manager (25)
Herbicide Branch
Registration Division

Enclosure

EH 1143 HERBICIDE

FOR SALE TO, USE AND STORAGE BY PROFESSIONAL TURF MAINTENANCE PERSONNEL ONLY. NOT FOR SALE TO HOMEOWNERS

ACTIVE INGREDIENTS:

Monosodium acid methanearsonate	18.70%
Dimethylamine salt of 2-methyl-4-chlorophenoxyacetic acid	6.21%
Dimethylamine salt of 2-(2-methyl-4-chlorophenoxy)propionic acid	6.17%
Dimethylamine salt of (+)-(R)-2-(2-methyl-4-chlorophenoxy)propionic acid	3.09%
Dimethylamine salt of dicamba: 3,6-dichloro-o-anisic acid	1.48%
INERT INGREDIENTS:	67.44%
INERT INGREDIENTS	70.52%
TOTAL	100.00%

THIS PRODUCT CONTAINS:

1.86 lbs. monosodium methanearsonate per gallon or 18.70%. Total Arsenic (as elemental) all in water soluble form 8.66%. 0.51 lb. 2-methyl-4-chlorophenoxyacetic acid or 5.09%. 51 lb. 2-methyl-4-chlorophenoxyacetic acid or 5.09%.

0.51 lb. 2 (2 methyl 4 chlorophenoxy) propionic acid equivalent per gallon or 5.10%

0.26 lb. (+)-(R)-2-(2-methyl-4-chlorophenoxy) propionic acid equivalent per gallon or 2.55%

0.12 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 1.23%. V

CONTAINS SINGLE ISOMER FORM OF MECOPROP-D

ACCEPTED KEEP OUT OF REACH OF CHILDRESOMMENTS In EPA Letter Dated:

WARNING

NOV 1 0 1998 Under the Federal Insecticide Act as amounted, for the posteriol

See side panels for additional Precautionary Statements and Statement of Practical Treatment.

Keep From Freezing - Shake Well Before Using

NET CONTENTS ONE GALLON (3.785 LITERS)

APXXXXX
EPA Reg. No. 2217-797
EPA Est. No. 2217-KS-1
MANUFACTURED BY:

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EPA Reg. No. 2217-797 Amendment



READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING: May be fatal if absorbed through skin. Harmful if swallowed. Causes substantial but temporary eye injury. Do not get into eyes, on skin or on clothing. Wear protective clothing, rubber gloves and goggles or face shield. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

Statement of Practical Treatment

IF IN EYES: Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Get medical attention.

IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

ENVIRONMENTAL HAZARDS:.

Drift or runoff may adversely affect nontarget plants. For terrestrial uses, do not apply directly to water, or 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 washwater. When cleaning equipment, do not pour the washwater on the ground; spray or drain over a large area away from wells and other water sources. Do not apply when weather conditions favor drift from area treated.

Most cases of groundwater contamination involving phenoxy herbicides such as MCPA and MCPP have been associated with mixing/loading and disposal sites. Caution should be exercised when handling MCPA and MCPP pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

DIRECTIONS FOR USE

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

Do not reenter or permit workers to reenter treated area until sprays have dried or dusts have settled.

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 & DISPOSAL

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

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STORAGE: Store in original container in a locked storage area. Keep from freezing.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke.

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SITES AND TURFGRASS:

EH 1143 Herbicide is intended to be applied by lawn care operators and landscape personnel for use in ornamental lawns and turf established in institutional, ornamental, and residential/domestic sites. Institutional sites are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities and golf courses. Ornamental sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries and institutional buildings. Finally, residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.

EH 1143 Herbicide provides selective broadleaf control in warm season and cool season turfgrass. Established turf of bermudagrass, zoysiagrass, Kentucky bluegrass, perennial ryegrass, tall fescue, and turf-type tall fescues may be treated.

Do not use on St. Augustinegrass, bentgrass, carpetgrass, centipedegrass, red fescues, dichondra, nor on lawns or turf where desirable clovers are present.

TIMING:

Apply to emerged grass and broadleaf weeds that are actively growing. Adverse environmental conditions prior or after application may reduce the effectiveness or increase the risk of turfgrass phytotoxicity.

Weed control is best achieved when temperatures are above 70°F. However, Do Not apply this product to Kentucky bluegrass and stated cool season turfgrass when air temperatures exceed 80°F nor when drought conditions exist. Do Not apply this product to bermudagrass and zoysiagrass when air temperatures exceed 90°F nor when drought conditions exist. Schedule the application to match the conditions of adequate soil moisture and the suggested air temperatures. Temporary discoloration may occur and high spray volumes may reduce the turf discoloration. If turf is showing stress due to high temperatures and/or drought, irrigation is recommended 2 to 3 days after treatment.

Spring applications are suggested for newly emerged crabgrass and for broadleaf weed control. Summer applications can be made to more mature crabgrass and to broadleaf weeds.

Sequential or follow-up applications may be required for dense infestations of perennial and biennial weeds. If required, the treatment interval between the first and second application should be 10 to 14 days.

SPRAY VOLUMES:

Apply EH 1143 Herbicide with sufficient water for good coverage. Spray volumes of 1½ to 5 gallons per 1,000 square feet of turfgrass are recommended. Or the equivalent spray volumes of 75 to 220 gallons per acre are suggested.

APPLICATION RATES:

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

Single Application Program:

For postemergence control apply 3.0 to 5.0 fluid ounces of EH 1143 Herbicide per 1,000 square feet of turfgrass. Or the equivalent dosage rate is 1.0 to 1.7 gallons of EH 1143 Herbicide per acre.

Sequential or Split Application Programs:

As an alternative to single application programs, EH 1143 Herbicide may be applied as a sequential treatment. This program is recommended for hybrid bermudagrass established on greens and appropriate and for common bermudagrass maintained under intensive management. Also, sequential applications are desirable to reduce the turfgrass injury and to provide improved control of perennial weeds.

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For postemergence control with sequential applications, apply 3.0 fluid ounces of EH 1143 Herbicide per 1,000 square feet per application. Or the equivalent dosage rate is 1.0 gallon of EH 1143 Herbicide per acre per application. The second application should be made at 10 to 14 days after the initial application.

TABLE 1. Application schedules, rates, and intervals for cool season and warm season turfgrass.

	Application	Application Rates		Application Interval,	
Turfgrass	Schedule	fl.ozs./1,000 sq.ft.	galions per acre	Days	
Kentucky Bluegrass,	Single	3.0 to 5.0	1.0 to 1.7		
Perennial ryegrass, Tall fescue, and Turf-type tall fescues	Sequential	3.0	1.0	10 to 14	
Common bermudagrass and zoysiagrass	Single Sequential	3.0 to 5.0 3.0	1.0 to 1.7 1.0	10 to 14	
Hybrid bermudagrass	Single	3.0	1.0		
	Sequential	2.5 to 3.0	0.85 to 1.0	_ 10 to 14	

SPOT TREATMENTS:

Spot Treatments For Established Bermudagrass, Zoysiagrass, Kentucky Bluegrass, Perennial Ryegrass, Tall Fescue, and Turf-Type Tall Fescues: Mix 3 fluid ounces of EH 1143 Herbicide in 3 gallons of water for treatment of 1,000 square feet of turf. Spray the target weeds only and wet the entire leaf surface. Withhold sprinkling or irrigation for 24 hours after application. Two or more repeat applications at 10 to 14 day intervals may be required. Temporary discoloration of the turfgrass may occur.

APPLICATION SUGGESTIONS:

- 1. Delay mowing 3 to 4 days before and after the application of this product.
- 2. Do not apply this product immediately before rainfall or irrigation. Also, rainfall or irrigation within 24 hours after application may reduce the effectiveness. Do not irrigate or water the turfgrass within 24 hours after application.
- 3. Treated areas of common bermudagrass, Kentucky bluegrass, perennial ryegrass, and the fescues may be reseeded 3 to 4 weeks after application.
- 4. Low rates of this product may be used on newly sodded, sprigged or plugged lawns of hybrid bermudagrass and zoysiagrass. Treatments of newly established areas should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations. Use one-half of the recommended dosage rate per application.

WEED SPECTRUM:

EH 1143 Herbicide controls a wide variety of problem weed species including crabgrass, dallisgrass, nutsedge, spurge and dandelion.

Aster	Healall	Poison oak	
Bedstraw	Henbit	Purslane	
Black medic	Knotweed	Ragweed	
Burdock	Lambsquarters	nbsquarters Sandbur	
Chicory	Lespedeza	Sheep sorrel	
Chickweed	Mallows	Shepherdspurse	
Clovers	Morningglory	Speedwell	
Crabgrass	Nutsedge	Spurge	
Dallisgrass	Peppergrass	Wild carrot	
Dandelion	Pigweed	Wild gartic	
Docks	Plantain	Wild lettuce	
Goosegrass	Poison ivy	Yarrow	
Ground Ivy	•		

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USE PRECAUTIONS:

- 1. Do not apply this product through any type of imgation system.
- 2. Avoid drift of spray mist onto vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near these plants.
- Do not use a hose end scrayer.
- 4. Coarse sprays are less likely to drift. Avoid fine mists. Do not spray roots of trees and ornamentals. Do not exceed specified dosages for any area; be particularly careful within the dripline of trees or other ornamental species.
- 5. Do not use on St. Augustinegrass, bentgrass, carpetgrass, centipedegrass, red fescues, dichondra, nor on lawns or turff where desirable clovers are present.
- 6. Do not spray while grass is emerging from dormancy.
- 7. After using this product, clean sprayer with Gordon's Spray Tank Cleaner and rinse thoroughly with water before applying other pesticides.

LIMITED WARRANTY AND DISCLAIMER.

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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