2217-758

2/15/2002

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

1/11

FEB 15 2002

Craig Martens
PBI/Gordon Corporation
1217 West 12th St.
P.O. Box 014090
Kansas City, Missouri 64101-0090

Dear Mr. Martens:

SUBJECT: Conversion from 2,4-DP to 2,4-DP-p
Trimec 937 Herbicide
EPA Registration No. 2217-758
Your Submission Dated November 20, 2001

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 forms [2-(2,4-dichlorophenoxy) propionic acid, or applicable salt thereof] to its single isomer form [(+)-R-2-(2,4-dichlorophenoxy)propionic acid, or applicable salt thereof]. The revised labeling 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, or applicable salt thereof, and bearing the previously approved labeling for 18 months from the date of this letter.

Copies of the revised Confidential Statement of Formula (Basic and Alternate Formulations, dated November 16, 2001) have been placed in the Agency's file for the subject product. These CSFs supersede all previously submitted CSF's for this product.

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,

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

CONCURRENCES								
SYMBOL ▸	7505C							
SURNAME ▸	Mehlan							
DATE	2/15/02							

2/11

TRIMEC® 937 HERBICIDE

ACTIVE INGREDIENTS:	
Isooctyl (2-ethylhexyl) ester of 2,4-dichlorophenoxyacetic acid	32.45%
2-ethylhexyl ester of (+)-R-2-(2,4-dichlorophenoxy)propionic acid	15.90%
Dicamba: 3,6-dichloro-o-anisic acid	5.38%
INERT INGREDIENTS:	46.27%
TOTAL	100.00%

THIS PRODUCT CONTAINS:
1.89 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 21.54%
0.94 lbs. 2-ethylhexyl ester of (+)-R-2-(2,4-dichlorophenoxy)propionic acid equivalent per gallon or 10.77%
0.47 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 5.38%
Isomer Specific by AOAC Method
Contains Petroleum Distillates
Contains the single isomer form of 2,4-DP-p
TRIMEC® is a registered trademark of PBI/GORDON CORPORATION

KEEP OUT OF REACH OF CHILDREN

WARNING-AVISO

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted in detalle. (If you do not understand the label, find some one to explain it to you in detail.)

Statement of Practical Treatment

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

IF SWALLOWED: Call a physician or Poison Control Center immediately. Contains petroleum solvent. Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration, and monitor for breathing difficulty.

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.

See side panels for additional Precautionary Statements.

NET CONTENTS ____ U.S. GALLON

785, 786/ AP
EPA REG. NO. 2217-758 Amend
EPA Est. No. 2217-KS-1
MANUFACTURED BY:

pbi/gordon corporation
An Employee-Owned Company
1217 West 12th Street
Kansas City, Missouri 64101

ACCEPTED
with COMMENTS
In EPA Letter Dated
FEB 15 2002

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2217-758

EPA Reg. No. 2217-758 Amendment

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

PRECAUTIONARY STATEMENTS

Hazards To Humans and Domestic Animals

WARNING: Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin. Harmful if inhaled. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: • Long-sleeved shirt and long pants • Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber, or viton • Shoes plus socks • Protective eyewear • Chemical-resistant apron when cleaning equipment, mixing or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements for WPS Uses:

Containers over 1 gallon and less than 5 gallons in capacity: Mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

Containers of 5 gallons or more in capacity: Do not open-pour from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. *(Note: This is not an option in California, see Calif. Code of Regulations, Article 2, Section 6746.)* If the contents of a nonrefillable pesticide container are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing

ENVIRONMENTAL HAZARDS:

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and 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.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D and 2,4-DP-p have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D and 2,4-DP-p 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.

PHYSICAL OR CHEMICAL HAZARD: Do not use or store near heat or open flame.

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 or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: • Coveralls • Chemical-resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber, or viton • Shoes plus socks • Protective eyewear.

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 allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried.

Trimec® 937 Herbicide is recommended to control perennial broadleaf weeds and undesirable woody plants established in noncropland. It is effective for buckbrush, poison ivy, multiflora rose, and sumac established in the uncultivated areas presented below:

UNCULTIVATED AGRICULTURAL AREAS AND UNCULTIVATED NONAGRICULTURAL AREAS:

A. Recommended Noncropland Sites.

- Barrier strips
- Farmyards
- Fencerows or fence lines
- Firebreaks
- Highway rights-of-way (principal, interstate, county, private, and unpaved roads): Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians.
- Industrial sites: Lumberyards, tank farms, fuel or equipment storage areas.
- Municipal, state, and federal lands: Airports and military installations
- Railroad rights-of-way
- Recreation areas: Fairgrounds, golf courses, parks, and areas adjacent to athletic fields.
- Utility rights-of-way: Telephone, pipeline, electrical powerlines, and communication transmission lines

B. Prohibitions for Noncropland Sites.

- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.

INSTRUCTIONS:

To effectively control brush, all leaves, stems and suckers should be thoroughly wetted to the ground. Apply when plants come into full leaf (spring) until plants begin to go dormant. Best results are obtained when brush and broadleaf weeds are young and actively growing. Do not cut brush until the herbicide has translocated throughout the plant causing root death.

USE PRECAUTIONS:

Do not apply this product through any type of irrigation system. Avoid spray drift to cotton, soybeans, tomatoes, tobacco, grapes, fruit trees, flowers, or garden crops and all other hormone herbicide sensitive desirable plants. Do not apply herbicide when wind speed is sufficient to cause drift. Do not apply herbicide when air temperature inversion exists. An air inversion may be detected by creating a smoke column and observing a layering effect. Do not apply when temperatures exceed 85°F and humidity is high. To aid in avoiding spray drift, use coarse sprays and low pressure. Do not use nozzles which produce fine spray droplets under high pressure. The use of thickening agents or anti-drift additives and drift reducing equipment may be of value in preventing spray drift. Care should be taken not to make applications where runoff could carry the chemical to food crops or grazing lands where cattle, sheep, goats, swine or poultry would be exposed.

6/11

SPRAY PREPARATION AND TANK MIXTURES:

Water Spray: Add one-half the required amount of water to the spray tank, then add Trimec® 937 Herbicide slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

Full Oil Spray: Use diesel oil, No. 1 or No. 2 fuel oil, kerosene, mineral oil, or basal oils. Add one-half the required amount of oil to the spray tank, then add Trimec® 937 Herbicide with agitation and complete filling the tank with oil. Mix thoroughly and provide adequate agitation during mixing and spraying.

Tank Mixing with Garlon® 4 Herbicide: Trimec® 937 Herbicide can be mixed with Garlon® 4 Herbicide for use in, roadsides, rights-of-way, railroads, fencerows, industrial sites and other similar noncrop areas. Garlon® 4 Herbicide is a butoxyethylester formulation containing 4.0 pounds per gallon of the active ingredient triclopyr. A mixture of Trimec® 937 Herbicide and Garlon® 4 Herbicide should be used in accordance with the more restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing. Aerial applications of this tank mixture can be made with helicopter only.

Three steps for tank mixing with Garlon® 4 Herbicide are suggested. First, add one-third of the required amount of diesel oil or water to the spray tank. Next, add the Trimec® 937 Herbicide slowly with agitation, then add another one-third of the carrier to the tank. Finally, add slowly the Garlon® 4 Herbicide and the balance of the carrier. Do not mix the chemicals simultaneously and continue the agitation during each step.

High Volume: Mix 0.5 to 1.0 gallon of Trimec® 937 Herbicide per 100 gallons of water and apply 100 to 300 gallons of spray per acre. The dosage rate and the spray volume depend upon the height and density of the brush and/or weeds. For small broadleaf weeds use the low dosage rate and the low spray volume. Heavy dense stands of brush require the high dosage rate and the high spray volume.

For small applications with small tank sprayers use 1.0 to 1.5 fluid ounces of product per one (1) gallon of water.

Leaf-Stem: Mix 0.5 to 2.0 gallons of Trimec® 937 Herbicide in water to make 15 to 25 gallons total spray mixture per acre. Use an adequate spray volume to ensure uniform wetting of plants.

Basal Bark: Apply with low volume backpack sprayer or power equipment. Volume sprayed per acre will depend on method used and number of stems per acre. Use a coarse spray to avoid drift.

High Volume Basal Bark: For high volume applications, apply a coarse spray as a drench treatment to the base of stems and trunks up to a height of 18 to 24 inches. Total coverage of the stems and root collars is essential. Spray until runoff and pooling at the ground line is noticed.

Mix 3.0 to 5.0 gallons of Trimec® 937 Herbicide with 95 to 97 gallons of oil (diesel oil, No. 1 or No. 2 fuel oil, kerosene, or mineral oil). Spray volumes will depend upon the sizes, types, and densities of the species present.

Low Volume Basal Bark: For low volume applications, apply a uniform spray pattern to all sides of the stems and trunks up to a height of 18 to 24 inches. Treat the entire circumference of the tree.

Mix a full oil spray containing 33% Trimec® 937 Herbicide, 10 to 20% surfactant, and 47 to 57% diesel oil. Suggested surfactants include Cide-Kick, Cide-Kick II, or other surfactants/penetrants appropriate for oil soluble herbicides. Substitutes for diesel oil as a diluent include the following basal oils: Androc Oil, Hy-Grade I, Arborchem Basal Oil, JLB Oil Plus, and other blends formulated for basal bark applications.

Cut Surface – Stump: This method can be used at anytime of the year, but is more effective when applied as soon as possible after trees are cut. Spray the entire stump, particularly bark and exposed roots. Complete control requires a thorough drenching. Use this method after original or capital clearing. It is the primary step toward a chemical brush control program on newly cleared highways and rights-of-way. Spray is most effective and economical on tree stumps with diameters larger than 3 to 4 inches.

Mix 0.5 to 1.0 gallon of Trimec® 937 Herbicide with 25 gallons of diesel oil, basal oils, penetrant oils, or mineral oil. Apply to freshly cut tree stumps with a low volume knapsack sprayer using a cone nozzle. Spray thoroughly the cut surfaces, bark, and exposed roots. Treat the entire circumference of the tree. Drench until runoff to the soil surface is noticed.

For painting freshly cut stumps, mix 2 quarts of Trimec® 937 Herbicide with 1.0 gallon of basal oil and thoroughly paint all surfaces of the stump.

Frill Treatment: This treatment is recommended for culling trees with trunk diameters greater than 5 to 6 inches. Make a frill by using an axe to cut overlapping notches in a continuous ring around the trunk near its base. Cut through the bark, but do not remove chips.

Mix 3.0 to 4.0 gallons of Trimec® 937 Herbicide in 100 gallons of diesel oil or mineral oil and treat freshly cut frills anytime of the year. Spray or pour the spray mixture into the frills without runoff.

BRUSH CONTROLLED:		
Ash	Cottonwood	Oak
Aspen	Dogwood	Pine
Birch	Elm	Shortleaf pine
Blackberry	Gooseberry	Spruce
Black cherry	Honey locust	Sumac
Black locust	Honeysuckle	Sycamore
Brambles	Kudzu	Trumpetcreeper
Buckbrush	Maple	Wild plum
Cedar	Multiflora rose	Willow
Cherry		

8/11

- BROADLEAF WEEDS -		
Aster, white heath & white prairie	Field oxeye-daisy (*creeping oxeye)	Poison oak
Bedstraw	Filaree, whitestem & redstem	Prostrate knotweed (*knotweed)
Beggarweed, creeping	Florida pusley	Puncturevine
Bindweed	Ground ivy	Purslane
Black medic	Groundsel	Ragweed
Broadleaf plantain	Hawkweed	Red sorrel (*sheep sorrel)
Buckhorn plantain	Healall	Shepherdspurse
Bull thistle	Henbit	Spotted spurge
Burclover	Jimsonweed	Spurge
Burdock, common	Kochia	Sunflower
Buttercup, creeping	Lambsquarters	Thistle
Carpetweed	Lawn burweed	Velvetleaf (*pie marker, Indian mallow)
Chickweed, common	Lespedeza, common	*Veronica* (*corn speedwell)
Chicory	Mallow, common	Virginia buttonweed
Cinquefoil	Matchweed	White clover (*Dutch clover, honeysuckle clover, white trefoil & purplewort)
Clover	Mouseear chickweed	Wild carrot
Cocklebur	Mustard	Wild garlic
Compassplant	Nettle	Wild geranium
Curly dock	*Oxalis* (*yellow woodsorrel & creeping woodsorrel)	Wild lettuce
Dandelion	Parsley-piert	Wild mustard
Dayflower	Pennsylvania smartweed (*smartweed)	Wild onion
Deadnettle	Pennywort (*dollarweed)	Wild strawberry
Dock	Pepperweed	Wild violet
Dogfennel	Pigweed	Yarrow
English daisy	Pineappleweed	Yellow rocket
False dandelion (*spotted catsear & common catsear)	Plantain	
Field bindweed (*morningglory & creeping jenny)	Poison ivy	

*Synonyms

9/11

FOR USE ON RESIDENTIAL AND ORNAMENTAL TURFGRASS SITES AND SOD FARMS (COOL SEASON GRASSES OTHER THAN BENTGRASS):

USE PRECAUTIONS:

Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near desirable plants. Do not use on carpetgrass, dichondra, St. Augustinegrass, bentgrass, nor on lawns or turf where desirable clovers are present. Use only lawn type sprayers. Avoid fine sprays; coarse sprays are less likely to drift. Do not spray roots of ornamentals and trees. Do not exceed specified dosages for any area; be particularly careful within the dripline of trees and other ornamental species. Do not apply to newly seeded grasses until well established. Do not spray when air temperatures exceed 85°F. Seed can be sown 3 to 4 weeks after application. Care should be taken not to make applications where runoff could carry the chemical to food crops or grazing lands where cattle, sheep, goats, swine or poultry would be exposed.

INSTRUCTIONS:

Maximum control of weeds will be obtained from spring or early fall applications when weeds are actively growing. Avoid spraying during long, excessively dry or hot periods unless adequate irrigation is available. Do not irrigate within 24 hours after application.

General Application - Apply 2.0 to 3.0 pints of product in 20 to 260 gallons of water per acre (0.75 to 1.1 fluid ounces of product in 0.5 to 6.0 gallons of water per 1,000 square feet). Use higher rates when using the higher volume of water per acre.

The maximum application rate to turf is 0.8 pounds 2,4-D acid equivalent per acre per application per site. The maximum number of broadcast applications per treatment site is 2 per year.

Controlled Droplet Applicator (CDA) - Add 1.5 pints to the Herbi container and fill with water. Spray contents over 33,000 square feet. Avoid overlapping between spray patterns.

Small Area Applications - Not recommended for hose end sprayers. Spray anytime during the growing season when weeds are actively growing. On new lawns wait until the grass has hardened off, usually after it has been mowed at least three times. Poor weed control may result if spray is applied during drought or just before rain. Do not water within 24 hours after treatment.

Spray Preparations For Hand Operated Sprayers

Amount of Product to Use:		Gallons of Water	Area To Treat Square Feet
Tablespoons	Fluid Ounces		
1½	¾	1	1,000
3	1½	2	2,000
4½	2¼	3	3,000

Garlon® Herbicide is a registered trademark of Dow AgroSciences, L.L.C.
Cide-Kick and Cide-Kick II, JLB Oil Plus are products of JLB International Chemical, Inc.
Arborchem Basal Oil is a product of Arborchem Products Co.
Hy-Grade I is a product of CWC Chemical, Inc.
Androc Oil is a product of Androc Products, Inc.

STORAGE & DISPOSAL

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

STORAGE: Keep from freezing. Store in original container in a locked storage area inaccessible to children and pets.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. 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: *For Plastic Containers* - 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. *For Metal Containers* - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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.

11/11

APPENDIX

I. Advertising claims that may be presented on the retail container label or on the labeling accompanying the product.

- A Brush Killer & Broadleaf Weed Herbicide
- For Broadleaf Weed Control In Turf
- One Gallon Covers Up To 4 Acres. - 8 Ounces Covers Up to 11,000 Square Feet
- Controls: ash, aspen, brambles, kudzu, oak, willows, dandelion, chickweed, knotweed, plantain, henbit, spurge and many other species of brush and broadleaf weeds including those listed on this label.