JAN 29 2002

Craig Martens
PBI/Gordon Corporation
P.O. Box 014090
1217 West 12th Street
Kansas City, NO 64101

Dear Mr. Martens:

Subject:

Conversion from 2,4-DP to 2,4-DP-p

3-D Brush Killer

EPA Registration Number: 2217-824

Your Submission Dated November 12, 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 dichlorprop from its racemic form [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 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 Statements 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 dichlorprop, or applicable salt thereof, and bearing the previously approved labeling for 18 months from the date of this letter.



Copies of the revised Confidential Statements of Formula Basic and Alternate Formulations, dated 11/12/01 has been placed in the Agency's file for the subject product. These CSFs supersedes all previously submitted CSFs 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)

**Enclosure** 

# **3-D BRUSH KILLER**

ACTIVE INGREDIENTS:	
Isooctyl (2-ethylhexyl) ester of 2,4-dichlorophenoxyacetic acid	9.74%
2-ethylhexyl ester of (+)-R-2-(2,4-dichlorophenoxy) propionic acid	4.78%
Dicamba: 3,6-dichloro-o-anisic acid	1.65%
INERT INGREDIENTS:	<u>83.83%</u>
TOTAL	100.00%

This product contains:

0.49 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 6.46%

0.24 lbs. 2-ethylhexyl ester of (+)-R-2-(2.4-dichlorophenoxy) propionic acid equivalent per gallon or 3.23%

0.12 lbs. 3,6-dichloro-o-anisic acid equivalent per gallon or 1.65%

Contains the single isomer form of 2,4-DP-p.

Contains aromatic petroleum distillates.

Isomer Specific by AOAC Method

## KEEP OUT OF REACH OF CHILDREN

## WARNING

See next panel for Statement of Practical Treatment (First Aid) and additional Precautionary Statements.

NET CONTENTS: 1 QUART, 2 QUARTS, 1 GALLON, or 2.5 GALLONS

AP EPA Reg. No. 2217-824 Amend EPA EST. NO. 2217-KS-1 MANUFACTURED BY:

pbl/soacon
coapparation
An Employee-Owned Company
1217 West 12th Street
Kansaa City, Missouri 64 (0)

ACCEPTED
with COMMENTS
In EPA Letter Dated

JAN 29 2002

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

## 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. Causes skin irritation. Harmful if swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing.

Clothing Requirement Statements: When using this product, wear long-sleeved shirt, long pants, socks, shoes, chemical resistant gloves and eye protection. It is recommended that safety glasses include front brow and temple protection.

Personal Hygiene Statements: After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

## **Engineering Control Statements**

Containers over 1 gallon and less than 5 gallons: Persons engaged in open pouring of this product must also wear coveralls or a chemical resistant apron.

Containers of 5 gallons or more: Do not open-pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

## Statement of Practical Treatment (or FIRST AID)

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

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 doctor or get medical attention. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of milk, eggwhites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

#### **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.

If spills occur, collect the material and dispose of by following disposal instructions on this label.

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

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



STORAGE: Store in original container in a storage area inaccessible to children.

PESTICIDE DISPOSAL: Securely wrap original container in several layers of newspaper and discard in

rash.

CONTAINER DISPOSAL: Do not reuse container. Rinse thoroughly before discarding in trash.

#### **GENERAL INFORMATION:**

This herbicide is intended for spot treatments for the control of broadleaf weeds, vines, and woody plants in noncropland areas. Spot treatments include foliar applications and cut surface-stump applications. This product controls or suppresses the following brush along fencelines, along walkways, on vacant lots, on parking areas, and on farm premises, around rocks and fringe areas, and around outbuildings, patios, houses, mobile homes, and areas associated with household or home life.

BRUSH CONTROLLE	D:		
Alder	Buckbrush	Hackberry	Shortleaf Pine
Ash	Cedar	Honey Locust	Spruce
Aspen	Cherry	Honeysuckle	Sumac
Birch	Common Sassafras	Kudzu	Sycamore
Blackberry	Cottonwood	Multiflora Rose	Trumpet Creeper
Black Cherry	Dogwood	Oak	Wild Plum
Black Locust	Elm	Pine	Willow
Boxelder	Gooseberry	Poplar	
WEEDS CONTROLLE	D:		
Bedstraw	Healall	Oxalis	Speedwell
Bindweed	Henbit	Peppergrass	Spurge
Black Medic	Jimsonweed	Pigweed	Sunflower
Buckhorn	Knotweed	Plantains	Thistles
Burdock	Kochia	Poison Ivy	Trumpet Vine
Chicory	Lambsquarters	Poison Oak	Velvetleaf
Chickweed	Lespedeza	Purslane	Wild Carrot
Clover	Mallow	Ragweed	Wild Garlic
Cocklebur	Morningglory	Sheep Sorrel	Wild Lettuce
Dandelion	Mustard	Shepherdspurse	Wild Onion
Dock	Nettle	Smartweed	Yarrow
Ground Ivy			

## **FOLIAR TREATMENTS:**

Foliar applications for mixed brush are effective from full leaf stage in the spring until leaf drop in the fall. For the best results, make applications during warm weather when the brush and broadleaf weeds are actively growing. Reduced performance may result with fall treatments following a frost.

Applications should be made on a spray-to-wet basis. All leaves, stems, shoots (suckers) should be thoroughly wetted to the ground. Backpack, knapsack, and hand operated sprayers are suitable for this method.

Mix 3.0 - 5.0 fl. oz. of product in 1.0 gallon of water or prepare a 2.0 - 4.0% spray solution. Or the equal measure is 6 - 10 tablespoons of product per 1.0 gallon of water. Use the higher dosage rates for larger plants, dense growth, late season applications or adverse conditions. Refer to Table 1 for additional instructions for spray preparations with water.

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**Table 1.** Mixing instructions for preparing 1 to 3 gallons of spray solution with water for foliar applications.

Spray Solution,	Amounts of product required for:		
Gallons	2.0%	3.0%	4.0%
1.0	3 fl. oz.	4 fl. oz.	5 fl. oz.
2.0	5 fl. oz.	8 fl. oz.	10 fl. oz
3.0	8 fl. oz.	12 fl. oz.	15 fl. oz.

Allow 5 - 7 days after application before cutting or removal. Additional applications may be needed to control regrowth on resistant species.

## **CUT SURFACE-STUMP TREATMENTS:**

The cut surface treatment is appropriate for tree stumps with diameters larger than 3 - 4 inches. Cut surface treatments are effective throughout the year except when snow, ice, or water prevents complete spray coverage.

The whole stump should be sprayed with this product soon after the trees are cut. Apply this product to the fresh cut stumps. Spray thoroughly the cut surfaces, bark, and the exposed roots. Treat the entire circumference of the tree stump. Drench until runoff to the soil is noticed. Backpack, knapsack, and hand operated sprayers are suitable equipment.

Mix 20 fl.oz. of product with 1 gallon of mineral oil, kerosene, diesel oil (No. 1 or No. 2 fuel oil), or modified vegetable oil, or water. Results may vary if water is used. Refer to Table 2 for additional instructions for spray preparations.

Spray solution ,	Amounts of product required:		
Gallons	fl. oz.	pints	cups
1.0	20	11/4	21/2
1.6	32	2	4

## RECOMMENDATIONS FOR ORNAMENTAL LAWNS AND TURF:

#### Re-entry Statement:

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

## WHERE TO USE:

3-D Brush Killer controls broadleaf weeds commonly found in cool season and warm season turfgrass in residential/domestic areas. Established turf of bermudagrass, Kentucky bluegrass, fescue *spp.*, perennial ryegrass, and zoysiagrass may be treated. Residential/domestic areas include turfgrass established around residences, apartment complexes, condominiums, vacant lots, or areas associated with households.

The best control of weeds will be obtained from spring or fall applications when the weeds are actively growing. However, this product is effective anytime during the growing season. Refer to the partial list of broadleaf weeds controlled by 3-D Brush Killer.

WEEDS CONTROLLED

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Bedstraw	Henbit	Purslane
Black Medic	Henbit	Ragweed
Buckhorn	Knotweed	Sheep Sorrel
Burdock	Lambsquarters	Shepherdspurse
Chicory	Lespedeza	Speedwell
Chickweed	Mallow	Spurge
Clover	Morningglory	Wild Carrot
Dandelion	Pepperweed	Wild Garlic
Dock	Pigweed	Wild Lettuce
Dollarweed	Plantains	Wild Onion
Ground Ivy	Poison Ivy	Yarrow and other broadleaf
Healall	Poison Oak	weeds in lawns and turf.

## **HOW TO USE:**

## Broadcast Treatments For Bermudagrass, Kentucky Bluegrass, Fescue spp., Perennial Ryegrass, and Zoysiagrass:

Hose end sprayers, backpack sprayers, tank sprayers, and hand operated sprayers are suitable for broadcast applications. Spray when the broadleaf weeds are small and actively growing.

Do not apply during periods of stress from drought, insects, or other herbicides. Avoid applications when temperatures are below 55°F and above 85°F. Do not apply this product to warm season turfgrass during spring green-up which is the transition period between dormancy and active growth. Treated areas may be reseeded 3 - 4 weeks after application.

The rate recommendations are presented as follows:

	Amount of	Treated Area (Square Feet) for:		
Turfgrass	3-D Brush Killer	1 quart	2 quarts	1 gallon
Kentucky bluegrass, fescue spp., perennial ryegrass, bermudagrass, and zoysiagrass	3 - 4 fl.ozs./1000 ft²	8,000 - 10,700 ft <sup>2</sup>	16,000 - 21,300 ft²	32,000 - 42,700 ft²

The higher rates are suggested for applications to dormant warm season turfgrass to control perennials such as wild onion and wild garlic.

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.

### For Backpack Sprayers, Knapsack Sprayers, Hand Operated Sprayers, And Other Tank Sprayers:

Use 3.0 - 4.0 fluid ounces (6 - 8 tablespoons) of product per 1,000 square feet of lawn. Spray volumes of 2.0 gallons per 1,000 square feet are recommended. Adjust the sprayer nozzle to deliver a coarse spray and apply uniformly.

## For Hose End Sprayers Without Dilution or Premixing:

Measure 3.0 - 4.0 fluid ounces (6 - 8 tablespoons) of product per 1,000 square feet into the sprayer jar. Do not add water. Attach the sprayer head to the jar and refer to the dilution rate presented in the instructions for the sprayer. Set the metering dial or pointer to the recommended setting of tablespoons per gallon. Attach the garden hose and apply uniformly.

## For Hose End Sprayers With Dilution or Premixing:

Measure 3.0 - 4.0 fluid ounces (6 - 8 tablespoons) of product per 1,000 square feet into the sprayer jar. Add (Fill with) water to the appropriate gallon mark on the jar. Attach the sprayer head to the jar. Attach the garden hose and apply uniformly.

## Spot Treatments For Bermudagrass, Kentucky Bluegrass, Fescue spp., Perennial Ryegrass, and Zoysiagrass:

Spot treatments may be appropriate for sparse weed infestations or as a follow-up treatment for dense weed infestations. Mix 2.0 - 3.0 fluid ounces of product per 1.0 gallon of water. Use for backpack sprayers, knapsack sprayers, hand operated sprayers, and other tank sprayers. Observe a 10 to 14 day interval between the first and second application for follow-up treatments. Do not use a hose end sprayer for spot treatments.

#### **APPLICATION RECOMMENDATIONS AND ADVISORIES:**

- 1. Do not apply this product to carpetgrass, dichondra, ornamentals, St. Augustinegrass, centipedegrass, buffalograss, or bentgrass lawns containing desirable clovers.
- 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 12 24 hours after application.
- 3. Treated areas of common bermudagrass, Kentucky bluegrass, perennial ryegrass, and fescue *spp.* may be reseeded 3 to 4 weeks after application.
- 4. Avoid spray drift onto vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants since injury may result. Do not spray roots of trees and ornamentals.

## 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.

TRIMEC® is a registered trademark of PBI/Gordon Corporation

## **APPENDIX**

## I. Advertising Claims that may be presented on the container or supplemental labeling:

- A Brush and Broadleaf Herbicide for Noncropland and Turf
- ♦ Controls Ash, Aspen, Kudzu, Oak, Willows, Dandelion, Chickweed, Knotweed, Plantains, Henbit, Spurge and many other species of brush and broadleaf weeds.
- Controls Multiflora Rose, Cedars, Locusts, Poison Oak and Poison Ivy, Honeysuckle, Thistles, Kochia, Kudzu, and many other trees, vines and broadleaf weeds.
- This product is fast acting.
- ♦ Contains Trimec<sup>®</sup> herbicide.
- Kills the roots
- Kills woody plants
- · Kills wild onions and wild garlic
- Controls (Number) weeds! (Listing of weeds may include the following) See next page.

- WEEDS -			
Annual yellow sweetclover	Cockle	Musk thistle	Spiny amaranth
Aster	Cocklebur	Mustard	Spiny cocklebur
Austrian fieldcress	Common mullein	Narrowleaf plantain	Spiny sowthistle
Bedstraw	Creeping jenny	Narrowleaf vetch	Spotted catsear
Beggarticks	Cudweed	Nettle	Spotted spurge
Betony, Florida	Curly dock	Orange hawkweed	Spurweed
Bindweed, field	Daisy, English	Oriental cocklebur	Stinging nettle
Bird vetch	Daisy fleabane	Oxalis	Strawberry, India mock
Bitter wintercress	Daisy, oxeye	Parsley-piert	Tall nettle
Bittercress, hairy	Dandelion	Parsnip	Tall vervain
Bitterweed	Dichondra	Pearlwort	Tansy ragwort
Black-eyed Susan	Dogbane	Pennycress	Tansy mustard
Black medic	Dogfennel	Pennywort	Tanweed
Black mustard	Dollarweed	Peppergrass	Thistle
Blackseed plantain	Elderberry	Pepperweed	Trailing crownvetch
Blessed thistle	False dandelion	Pigweed	Tumble mustard
Bloodflower milkweed	False flax	Pineywoods bedstraw	Tumble pigweed
Blue lettuce	False sunflower	Plains coreopsis (tickseed)	Velvetleaf
Blue vervain	Fiddleneck	Plantain	Venice mallow
Bracted plantain	Florida pusley	Poison ivy	Virginia buttonweed
Brassbuttons	Frenchweed	Poison oak	Virginia creeper
Bristly oxtongue	Galinsoga	Pokeweed	Virginia pepperweed
Broadleaf dock	Goathead	Poorjoe	Water pennywort
Broadleaf plantain	Goldenrod	Prairie sunflower	Wavyleaf bullthistle
Broomweed	Ground ivy	Prickly lettuce	Western clematis
Buckhorn	Gumweed	Prickly sida	Western salsify
Buckhorn plantain	Hairy fleabane	Prostrate knotweed	White mustard
Bulbous buttercup	Hawkweed	Prostrate pigweed	Wild aster
Bull thistle	Healall	Prostrate spurge	Wild buckwheat
Bullnettle	Heartleaf drymary	Prostrate vervain	Wild carrot
Burclover	Heathaster	Puncturevine	Wild four-o'clock
Burdock	Hedge bindweed	Purslane, common	Wild garlic
Burning nettle	Hedge mustard	Ragweed	Wild geranium
Burweed	Hemp	Red sorrel	Wild lettuce
Buttercup	Henbit	Redroot pigweed	Wild marigold
Buttonweed	Hoary cress	Redstem filarce	Wild mustard
Canada thistle	Hoary plantain	Rough cinquefoil	Wild onion
Carolina geranium	Hoary vervain	Rough fleabane	Wild parsnip
Carpetweed	Horsenettle	Russian pigweed	Wild radish
Catchweed bedstraw	Jimsonweed	Russian thistle	Wild rape
Catnip	Knawel	Scarlet pimpernel	Wild strawberry
Catsear	Knotweed	Scotch thistle	Wild sweet potato
Chickweed, common	Kochia	Sheep sorrel	Wild vetch
Chickweed, mouseear	Lambsquarters	Shepherdspurse	Woodsorrel
Chicory	Lespedeza	Slender plantain	Woolly croton
Cinquefoil	Mallow	Smallflower galinsoga	Woolly morningglory
Clover, crimson	Matchweed	Smooth dock	Woolly plantain
Clover, hop	Mexicanweed	Smooth pigweed	Wormseed
Clover, red	Milk vetch	Sorrel	Yarrow
Clover, strawberry	Morningglory	Sowthistle	Yellow rocket
Clover, sweet	Mouseear hawkweed	Spanishneedles	Yellowflower pepperweed
Clover, white	Mugwort	Speedwell	and other broadleaf weeds