

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JAN 27 2008

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

James L. Kunstman PBI/Gordon Corporation P.O. Box 014090 Kansas City, MO 64101

Dear Dr. Kunstman:

Submission: Re-submission in response to an Agency letter dated June 15, 2005

EH 1312 Herbicide

EPA Registration Number 2217-807

Application Submission dated October 28, 2005

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

1. Under the heading Storage and Disposal the bullets must be **Pesticide Storage**, Pesticide Disposal and Container Disposal.

One copy of the label stamped "Accepted with comment" is enclosed for your records. This label supercedes all labels previously accepted for this product. Please submit one copy of the final printed label that incorporates the required changes before the product is released for shipment. If you have any questions, please contact Tracy White by phone at (703) 308-0042 or via email at <a href="white.tracy@epa.gov">white.tracy@epa.gov</a>.

Doanne J. Miller

Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505C)

# EH1312 HERBICIDE

For Sale To and Use By Professional Turf or Landscape Personnel Only.

Not For Sale To or Use By Homeowners.

# **ACTIVE INGREDIENTS:**

Dimethylamine salt of 2,4-dichlorophenoxyacetic acid	18.43%
Diethanolamine salt of 2,4-dichlorophenoxyacetic acid	9.14%
Dimethylamine salt of (+)-(R)-2-(2 methyl-4-chlorophenoxy)propionic acid	6.93%
Dimethylamine salt of Dicamba: 3,6-dichloro-o-anisic acid	2.75%
INERT INGREDIENTS:	62.75 <u>%</u>
TOTAL	100.00%

# THIS PRODUCT CONTAINS:

2.03 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 21.54% 0.54 lbs. (+)-(R)-2-(2 methyl-4-chlorophenoxy)propionic acid equivalent per gallon or 5.73% 0.21 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 2.29%

TRIMEC® is a registered trademark of PBI/GORDON CORPORATION. Contains the single isomer form of Mecoprop-p. Isomer Specific by AOAC Method 6.DOI-5.

ACCEPTED with COMMENTS In EPA Letter Dated:

JAN 27 2006

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

2211-809

# KEEP OUT OF REACH OF CHILDREN DANGER

See additional Precautionary Statements and First Aid on the side panel.

**NET CONTENTS: 1, 2, 5, or 15 U.S. GALLONS** 

APXXXXXX
EPA REG. NO. 2217-807
EPA EST. NO. 2217-KS-1
MANUFACTURED BY:

pbi/gondon
An Employee-Owned Company
1217 Wast 12th Street
Keneas City, Missouri 64101

Telephone: 1-800-821-7925

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

## PRECAUTIONARY STATEMENTS

# **Hazards to Humans & Domestic Animals**

**DANGER:** Corrosive. Causes irreversible eye damage. Do not get in eyes, on skin or on clothing. Harmful if swallowed, if absorbed through the skin, or if inhaled. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

### FOR TURF SITES ONLY:

Clothing Requirement Statements: When mixing, loading, or applying 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.

### FOR INDUSTRIAL SITES ONLY:

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

Clothing Requirement Statement: When mixing, loading or applying this product or repairing or cleaning equipment used with this product, wear eye protection (face shield or safety glasses), chemical resistant gloves, long-sleeved shirt, long pants, socks and shoes. It is recommended that safety glasses include front, brow, and temple protection. For applicators applying this product from a tractor that has a completely enclosed cab, eye protection is not required.

Personal Hygiene Statements: Wash hands, face and arms with soap and water as soon as possible after mixing, loading, or applying this product. Wash hands, face and arms with soap and water before eating, smoking, or drinking. Wash hands and arms before using toilet. After work, remove all clothing and shower using soap and water. Do not reuse clothing worn during the previous day's mixing and loading or application of this product without cleaning first. Clothing must be kept and washed separately from other household laundry. Remove saturated clothing as soon as possible and shower.

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.

# First Aid

If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If on skin:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

#### **ENVIRONMENTAL HAZARDS:**

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

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 MCPP-p have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D and MCPP-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.

# **DIRECTIONS FOR USE**

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

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

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.

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 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 Metal 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 other procedures approved by state and local authorities. 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.

## OTHER USE PRECAUTIONS - OBSERVE CAREFULLY.

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 on St. Augustinegrass or dichondra nor on lawns or turf where desirable clovers are present. Note: Coarse sprays are less likely to wind-drift. Do not spray exposed roots of trees and ornamentals. Do not exceed specified dosages for any area; be particularly careful within the dripline of tree and other ornamental species. Do not spray while grass is emerging from dormancy. Do not apply to newly seeded lawns until after the second or third mowing. Do not broadcast apply when air temperature exceeds 85°F. Some injury may be expected with spot treatments when air temperatures exceed 85°F. Seed can be sown 3 to 4 weeks after application. Do not contaminate domestic or irrigation waters. Be careful not to overdose centipedegrass. This species is sensitive to 2,4-D, a component of this product. After using this product, clean sprayer with soap or detergent and water, and rinse thoroughly before applying other pesticides. Failure to observe the above precautions may result in injury. Do not apply this product through any type of irrigation system.

### HOW MUCH TO USE AND WHERE:

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This product is intended for use on lawns, ornamental and residential turf, golf courses, parks, cemeteries and similar noncrop areas.

The maximum application rate to turf is 1.02 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.

# Bahiagrass, Common Bermudagrass, Bluegrass, Fescue, Ryegrass, and Zoysiagrass:

**Broadcast Treatments** - Use 31/4 to 4.0 pints of product per acre in 20 to 175 gallons of water. Or, apply 1.2 to 1.5 fluid ounces of product per 1,000 square feet with spray volumes of 0.5 to 4.0 gallons per 1,000 square feet. Do not use more than the recommended rate. Bermudagrass and zoysiagrass are moderately sensitive to 2,4-D.

**Spot Treatment** - Mix 1.2 to 1.5 fluid ounces of product in 1 gallon of water per 1,000 square feet. 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 stage.

Controlled Droplet Applicator - Add 2½ pints of product in 1 to 4 gallons of water per 33,000 square feet.

## Centipedegrass, Creeping Bentgrass and Hybrid Bermudagrass:

**Broadcast Treatments** - Use 1.8 pints of product per acre in 40 to 175 gallons of water. Do not use more than the recommended rate. Bentgrass and hybrid bermudagrass are moderately sensitive to 2,4-D.

Spot Treatment - Mix 0.66 (2/3) fluid ounces of product in 1 gallon of water per 1,000 square feet.

Controlled Droplet Applicator - Add 1.4 pints of product in 1 to 4 gallons of water per 33,000 square feet.

**General** - Mix in 20 to 175 gallons of water per acre. Use higher application rates when weeds are dense or in flower. If hardy weeds persist, make a second application after three weeks. Apply when weeds are young and actively growing. Avoid applications during long excessively dry or hot periods. When grasses are under stress use reduced rates to reduce potential injury. Do not apply to newly seeded turf until after the second or third mowing. Seed can be sown 3 to 4 weeks after application at recommended rates.

- WEEDS CONTROLLED -			
Bedstraw	Innocence (Blue-eyed Mary)	Purple cudweed	
Black medic	Knotweed	Purslane	
Buckhorn	Lambsquarters	Ragweed	
Burdock	Lawn burweed	Redweed	
Chicory	Lespedeza	Sheep xorrel	
Chickweed	Mallow	Shepherdspurse	
Clover	Morningglory	Speedwell	
Corn speedwell	Old world diamond flower	Spurge	
Dandelion	Peppergrass	Wild carrot	
Dock	Pigweed	Wild garlic	
Ground ivy	Plantai <del>n</del>	Wild lettuce	
Healall	Poison ivy	Wild onion	
Henbit	Poison oak	Yarrow	

## - INDUSTRIAL SITES -

EH1312 Herbicide can be incorporated into industrial vegetation management programs as broadcast or spot treatments. EH1312 Herbicide may be useful in the following noncropland areas:

- Highway rights-of-way (principal, interstate, state, and country highways), interchange ramps, waysides, service areas, and unpaved roads.
- Municipal, state, and federal lands such as airports, military installations, schools/universities, libraries, and hospitals.
- Commercial/industrial areas including industrial parks, tank farms, plant sites, storage areas, fencerows, and utility rights-of-way.

EH1312 Herbicide may be applied to established cool season and warm season grasses established in noncropland sites. Cool season grasses include tall fescue, perennial ryegrass, smooth bromegrass, orchardgrass, and reed canarygrass. Warm season grasses include bermudagrass, zoysiagrass, and bahiagrass.

# **USE PRECAUTIONS FOR INDUSTRIAL SITES:**

- 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 spray roots of desirable trees and shrubs.
- Do not apply herbicide when wind speed is sufficient to cause drift. Do not apply herbicides when a temperature air inversion exists. An air inversion may be detected by creating a smoke column and observing a layering effect.
- Do not apply when temperature exceeds 85°F and humidity is high.
- To reduce the potential of spray drift, use large spray droplets and low pressures. 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 contaminate bodies of water or spray drift could carry the chemical to food crops or grazing lands where cattle, sheep, goats, swine or poultry would be exposed.

# - APPLICATION RATES AND SPRAY VOLUMES FOR INDUSTRIAL SITES -

**Broadcast Treatment for Turfgrass** - Apply 3½ to 4.0 pints of product per acre as a broadcast treatment to annual, biennial, and perennial broadleaf weeds. Biennial and perennial weeds may require a follow-up or sequential treatment. Spray volumes of 15 - 150 gallons per acre are recommended.

Generally, the lower application rates within the specified range will provide satisfactory control. 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.

# DIRECTIONS, RESTRICTIONS AND LIMITATIONS FOR USE IN NON-CROPLAND

Broadcast applications to annual and perennial weeds: Apply to emerged weeds. For best results, treat when weeds are young and actively growing.

The maximum application rate to general noncropland sites is 1.0 gallon of product per acre per application per site.

When multiple applications of up to 2.0 lbs. acid equivalent per acre are utilized to reach the maximum seasonal use rate, do not make a repeat application within 30 days of the previous application.

Minimum spray volume: Use 2 or more gallons of spray solution per acre.

Number of applications: Limited to 2 applications per year.

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Broadcast applications to woody plants: Apply to trees and brush when foliage is fully expanded and plants are actively growing.

Up to 2.0 1.97 gallons of product per acre (4.0 lbs. acid equivalent per acre) may be applied in a single application to rights-of-way, including electrical power lines, communication lines, pipelines, highways and railroads that intersect wooded areas or stands of trees, brush and woody plants.

The maximum noncropland application rate for tree, brush and woody plant control is  $\frac{2.0}{2.0}$  1.97 gallons of product per acre per application per site.

Target species	Application schedule	Maximum application rate, Gallons of product per acre	Maximum application rate, Pounds of acid equivalent per acre per application	Maximum number of applications per year	Minimum days between applications	Minimum spray volume, gallons per acre
Annual and perennial weeds	Broadcast	1.0 gal/A	2.0 #/A	2	30 days	2
Woody plants	Broadcast and high volume foliar	<del>2.0 gal/A</del> 1.97 gal/A	4.0 #/A	1	NA	See Tables 1-2.



# High volume foliar applications (100-400 gallons per acre):

Apply 0.5-2.0 gallons of product per acre with adequate water or apply a 0.5-2.0% vol/vol spray solution as a full cover spray with high volume equipment. Use the lower spray concentrations in the range for susceptible species and use the higher spray concentrations within the range for hard-to-control species, for mature plants during the late summer or under adverse environmental conditions (e.g. drought).

Spray broadleaf weeds, woody plants or mixed brush uniformly and thoroughly by wetting all leaves, stems, bark and root collars. The total volume of spray solution required for adequate coverage of solid stands of mixed brush can range from 100-400 gallons of spray solution per treated acre. The spray preparation chart for applications on a spray-to-wet basis is shown below in Table 1.

**Table 1.** Instructions for preparing 100-400 gallons of spray solution at 0.5-2.0% spray concentration with water for high volume foliar applications.

Spray solution per	Amount of Product Needed for Spray Concentration of:			
acre, Gallons	0.5%	0.67%	1.0%	2.0%
100	0.5 gal.	0.67 gal.	1.0gal.	2.0 gal.
200	1.0 gal.	1.34 gal.	2.0 gal.	
300	1.5 gal	2.0 gal.		
400	2.0 gal.			

Equal measures: 1gallon = 4 quarts= 8 pints= 128 fl. oz.

The maximum seasonal application rate for trees, brush and woody plant control is 2.0 gallons of product per acre per application per site.

# For Backpack Sprayers, Knapsack Sprayers, And Hand-pressurized Pump Sprayers

**Table 2.** Instructions for preparing 1-3 gallons of spray solution at 0.5 -2.0% spray concentration with water for high volume foliar applications.

Gallons Amount Of Product Needed for Spray Concentration of :				
of Water	0.5 %	0.67 %	1.0 %	2.0 %
1	4 teaspoons	5 teaspoons	2½ tablespoons	5 tablespoons
2	2½ tablespoons	31/2 tablespoons	5 tablespoons	10 tablespoons
3	2 fl. oz.	2.5 fl. oz.	4 fl. oz.	8 fl. oz.

Equal measures: 1 fl. oz. = 2 Tablespoons (Tbs.) = 6 Teaspoons (tsp.)

Spot Treatments for Mixed-Brush - Spraying can be effective throughout the growing season from full leaf to leaf drop for mixed brush. Full cover sprays should be applied during warm weather when brush and broadleaf weeds are young and actively growing. All leaves, stems, and shoots should be thoroughly wetted to the ground.

For High Volume Foliar Applications - Use 6.0 to 8.0 pints of product in 30 - 100 gallons of water (1.0 - 3.0% vol./vol) and apply as a full sever spray wetting all leaves, stems, and root collars of the woody plants. This spray concentration requires a spray volume of 100 - 300 gallons per acre depending on the height and density of the mixed brush.

BRUSH:		
Ash	Elm	Oak
Aspen	Gooseberry	Shortleaf pine
Birches	Honey locust	Thistle
Black cherry	Kudzu	Willow
Brambles	Multiflora rose	
WEEDS:		
Bedstraw	Innocence (Blue-eyed Mary)	Purple cudweed
Black medic	Knotweed	Purslane
Buckhorn	Lambsquarters	Ragweed
Burdock	Lawn burweed	Redweed
Chicory	Lespedeza .	Sheep sorrel
Chickweed	Mallow	Shepherdspurse
Clover	Morningglory	Speedwell
Corn speedwell	Old world diamond flower	Spurge
Dandelion	Peppergrass	Wild carrot
Dock	Pigweed	Wild garlic
Ground ivy	Plantain	Wild lettuce
Healall	Poison ivy	Wild onion
Henbit	Poison oak	Yarrow

# 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.