UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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

NOV 3 0 2001

Dear Mr. Martens:

SUBJECT: EH-1068 Trimec® Ester

EPA Registration No. 2217-774

Application and Letter Dated November 12, 2001, Request

To Amend Registration: Conversion To MCPP-p, with Fast Track Review with Revised Formulations on EPA Form 8570-4, Confidential Statement of Formula (CSF), Basic and Three (3) Alternate CSFs, All Dated:

November 8, 2001

The proposed amendments to the registration of the subject pesticide product are conditionally accepted under section 3(c)(7)(A) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Under this amendment this Agency is approving the conversion of the active ingredient mecoprop from its racemic form [2-(2-methyl-4-chlorophenoxyl)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 in support of the conversion is acceptable with the following provisions, that you:

- 1. May sell or distribute this product containing the racemic form of mecoprop and bearing that previously approved labeling for 18 months from the date of this letter.
- 2. Revise the propose labeling to reflect the required "First Aid" statements, as stated in PR Notice 2001-1
- 3. Revise the proposed labeling to comply with the UCC articles (Sections 2-719 and 2-316) that apply to the the claims for limitation of remedy in the warranty statements. The commonly used language is: "Read the entire Directions for Use and Conditions of Sale and Warranty before using this product. If terms are not acceptable, return the unopened product container at once".
- 4. This labeling supersedes all previous accepted labeling. Submit one (1) copy of your final printed labeling prior to your shipment of this product under the enclosed stamped label.

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

The Confidential Statement of Formula (CSF) submitted on EPA Form 8570-4 (Rev.2-85) [Please use the up-dated Form in the future] and dated November 8, 2001 has been reviewed and found as an acceptable amendment to the registration of the subject pesticide product under FIFRA, as amended. A copy of this CSF has been filed in this Agency's record for this pesticide product. Please identify each alternate CSF in the future with a letter or a number that may be used to identify them. This comment applies to any application to register or to amend any registration submitted under the Federal Insecticide, Fungicide and Rodenticide Act, as amended.

Sincerely yours,

Joanne I. Miller
Product Manager (23)

Herbicide Branch

Registration Division (7505C)

Enclosure

Official Name: EH1068 TRIMEC® ESTER

Brand Name: TRIMEC® BRUSHMASTER BRUSHKILLER

ACTIVE INGREDIENTS:

Isooctyl (2-ethylhexyl) ester of 2,4-dichlorophenoxyacetic acid	18.85%
2-ethylhexyl ester of (+)-R-2-(2,4-dichlorophenoxy) propionic acid	9.24%
Dicamba: 3,6-dichloro-o-anisic acid	3.01%
INERT INGREDIENTS:	<u>69.90%</u>
TOTAL	100.00%

THIS PRODUCT CONTAINS:

1.02 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 12.50%

0.51 lbs. 2-ethylhexyl ester of (+)-R-2-(2,4-dichlorophenoxy) propionic acid equivalent per gallon or 6.25%

0.24 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 3.01%

CONTAINS AROMATIC PETROLEUM DISTILLATES.

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

Isomer Specific by AOAC Method

TRIMEC® is a serious at trademark of RRIGORDON CORP.

TRIMEC® is a registered trademark of PBI/GORDON CORPORATION

KEEP OUT OF REACH OF CHILDREN CAUTION

See next panel for Statement of Practical Treatment

and additional Precautionary Statements.

NET CONTENTS (1, 2.5, 5, 30, 55) U.S. GALLON

774 AP EPA REG. NO. 2217-774 Amend EPA Est. No. 2217-KS-1 MANUFACTURED BY:

An Employee-Owned Company 1217 West 12th Street Kunnan City, Minesturi #4101 ACCEPTED
with COMMENTS
In EPA Letter Dated

NOV 3 0 2001

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the posticide 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

CAUTION: Harmful if swallowed, absorbed through skin or inhaled. Causes moderate eye injury. Avoid contact with eyes, skin or clothing, or inhaling spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FOR INDUSTRIAL SITES ONLY -

Clothing Requirement Statements: When mixing, loading, or applying this product, or repairing or cleaning equipment used with this product, wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and eye protection. It is recommended that eye protection include front, brow and temple protection. For aerial applicators in an enclosed cockpit and 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 days 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.

FOR TURF SITES ONLY -

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

IF IN EYES: Flush with plenty of water. Call a physician if irritation persists.

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.

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. Do not apply when weather conditions favor drift from target area. Do not contaminate domestic or irrigation waters.

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.

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

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

OPTION(1)

DIRECTIONS FOR USE

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

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: <u>For Plastic Containers</u> - 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. <u>For Metal Containers</u> - 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.

EH1068 Trimec[®] Ester 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.

APPLICATION TIMING 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. Do not cut brush until the herbicide has translocated throughout the plant causing root death. Basal bark, cut stump, and frill treatments of EH1068 Trimec[®] Ester are appropriate during the dormant period before bud growth or any signs of active growth of the mixed brush. However, basal bark treatments may be applied anytime of the year except when water or snow prevents spraying to the ground line.

BRUSH CONTROLLED:				
Ash	Cottonwood	Oak		
Aspen	Dogwood	Pine		
Birch	Elm	Shortleaf Pine		
Blackberry	Gooseberry	Spruce		
Black Cherry	Honey Locust	Sumac		
Black Locust	Honeysückle	Sycamore		
Brambles	Kudzu	Trumpetcreeper		
Buckbrush	Maple	Wild Plum		
Cedar	Multiflora Rose	Willow		
Cherry		4000		

	- 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
Chickweed, common	Lespedeza, common	mallow)
Chicory	Mallow, common	Veronica (*corn speedwell)
Cinquefoil	Matchweed	Virginia buttonweed
Clover	Mouseear chickweed	White clover (*Dutch clover,
Cocklebur	Mustard	honeysuckle clover, white trefoil & purplewort)
Compassplant	Nettle	Wild carrot
Curly dock	Oxalis (*yellow woodsorrel &	Wild garlic
Dandelion	creeping woodsorrel)	Wild geranium
Dayflower	Parsley-piert	Wild lettuce
Deadnettle	Pennsylvania smartweed (*smartweed)	Wild mustard
Dock	Pennywort (*dollarweed)	Wild onion.
Dogfennel	Pepperweed	Wild strawberry
English daisy	Pigweed	Wild violet
False dandelion (*spotted catsear	Pineappleweed	Yarrow
& common catsear)	Plantain	Yellow rocket
Field bindweed (*morningglory & creeping jenny)	Poison ivy	

^{*}Synonyms

SPRAY PREPARATION:

Oil Spray - Add one-half the required amount of diesel oil (No. 1 or No. 2 fuel oil) to the spray tank, then add EH1068 Trimec[®] Ester with agitation and complete filling the tank with diesel oil. Mix thoroughly and provide adequate agitation during mixing and spraying.

Water Spray - Add one-half of the required amount of water to the spray tank, then add slowly EH1068 Trimec[®] Ester with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

Tank Mixing With Garlon® 4 Herbicide - EH1068 Trimec® Ester and Garlon® 4 Herbicide can be tank mixed in oil or water carriers for use in roadsides, rights-of-way, railroads, fencerows, industrial sites and other similar noncrop areas. Add one-third of the required amount of diesel oil or water to the spray tank. Add the EH1068 Trimec® Ester slowly with agitation, then add another one-third of the carrier to the tank. Next add slowly the Garlon® 4 Herbicide and the balance of the carrier. Do not mix the chemicals simultaneously. Continue the agitation during each step. All label limitations, dosage rates, and precautions of both products must be followed. A mixture of EH1068 Trimec® Ester 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 mix can be made with helicopter only.

BROADCAST FOLIAR APPLICATIONS:

Mixed Brush Applications With Ground Equipment:

For high volume foliar application - Use 1.0 to 2.0 gallons of EH1068 Trimec[®] Ester in 100 gallons of water (1.0 to 2.0% volume/volume) and apply as a full cover spray wetting all leaves, stems, and root collars of woody plants. This spray concentration requires a spray volume of 100 to 300 gallons per acre, depending on the height and density of the plants.

For low volume broadcast applications - Use 1.0 to 4.0 gallons of EH1068 Trimec[®] Ester per acre in 20 to 100 gallons of water. Use the higher dosage rates and spray volumes with hard to control species with dense canopies or under drought conditions.

TABLE 1. USE RATES FOR MIXED BRUSH WITH GROUND EQUIPMENT.

	Gallons of Product per 100 Gallons of Water	Gallons of Product per Acre	
Product Name	High Volume Foliar: 100 to 300 gal/A Total Spray Volume	Low Volume Broadcast: 20 to 100 gal/A Total Spray Volume	
EH1068 Trimec [®] Ester	1.0 to 2.0	1.0 to 4.0	
a)Diesel Oil, No. 1 or No. 2 fuel oil, mineral oil, or kerosene may be added to the water as an adjuvant at spray concentrations less than 1 to 2% volume/volume.			

Mixed Brush Applications With Aerial Equipment:

Use 1.0 to 4.0 gallons of EH1068 Trimec[®] Ester per acre in 8 to 25 gallons of water with aerial applications for mixed brush in noncropland areas. *Refer to Table 2.* For best control, the brush and broadleaf weeds should be young and actively growing at the time of spraying. Use the higher rates and spray volumes when plants are dense or under drought conditions. Apply with aircraft equipped to minimize spray drift and apply only when there is little or no wind.

TABLE 2. USE RATES WITH AERIAL EQUIPMENT.

Product Name	Gallons of Product per Acre	Total Spray Volume
EH1068 Trimec® Ester	1.0 to 4.0	8 to 25 gal/A

BASAL AND DORMANT APPLICATIONS:

Basal Bark Method - 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. Thorough coverage is required for all basal treatments.

For Full Oil or Undiluted Low Volume Applications - Mix a full oil spray containing 6.7 gallons of EH1068 Trimec[®] Ester, 1.3 to 2.3 gallons of diesel oil, and 1.0 to 2.0 gallons of penetrants. Substitutes for diesel oil include mineral oil, kerosene, and oil blends formulated for basal bark applications. Penetrants appropriate for oil soluble herbicides may improve control. Refer to Table 3.

TABLE 3. USE RATES FOR BASAL BARK METHOD WITH LOW VOLUME APPLICATIONS.

	Gallons Needed for Desired Volume			
Volume of Spray Solution, Gallons	EH1068 Trimec® Ester	Penetrants ^{a)}	Diesel Oil ^{b)}	Basal Oil®
10	6.7	1.0 to 2.0	1.3 to 2.3	
10	6.7	1.0 to 2.0		1.3 to 2.3

^{a)}Penetrants such as Cide-Kick or Cide Kick II may improve control. Penetrant concentrations range from 10 to 20% of the spray volume and the 20% concentration may be more suitable in cold weather. Crop oil concentrates with pariffinic oil concentrations greater than 80% may also be used.

Mineral oil or kerosene can be substituted for diesel oil.

Androc Oil, Hygrade I, Arborchem Basal Oil, JLB Oil Plus, or other proprietary basal oils may be used.

For Full Oil or Diluted High Volume Applications - Mix 6.0 to 10.0 gallons of EH1068 Trimec® Ester with 90 to 94 gallons of oil (diesel oil, No. 1 or No. 2 fuel oil, kerosene, or mineral oil).

For Backpack Sprayers, Knapsack Sprayers, and Hand Pump Sprayers - Mix 5.0 to 10.0 fluid ounces of EH1068 Trimec[®] Ester with 1 gallon of oil (diesel oil, No. 1 or No. 2 fuel oil, kerosene, mineral oil, or oil blends formulated for basal bark applications). Or use the equivalent spray concentration of 4.0 to 8.0% volume/volume.

Spray volumes will depend upon the sizes, types and densities of brush present. 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.

Cut Surface--Stump Treatment - This method is most effective and economical on stumps with diameters larger than 3 to 4 inches. This treatment can be applied throughout the year except when snow, ice or water prevents thorough spray coverage.

For Ground Equipment - Mix 1.0 to 2.0 gallons of EH1068 Trimec® Ester with 23 to 24 gallons of oil (diesel oil, No. 1 or No. 2 fuel oil, kerosene, mineral oil or other oil blends formulated for basal applications). Or use the equivalent spray concentration of 4.0 to 8.0% volume/volume.

For Backpack Sprayers, Knapsack Sprayers, and Hand Pump Sprayers - Mix 5.0 to 10.0 fluid ounces of EH1068 Trimec[®] Ester with 1.0 gallon of oil (diesel oil, No. 1 or No. 2 fuel oil, kerosene, mineral oil, or other oil blends formulated for basal applications). Spray thoroughly the cut surfaces, bark, and exposed roots. Treat entire circumference of the tree. Drench until runoff to the soil surface is noticed.

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 6.0 to 8.0 gallons of EH1068 Trimec[®] Ester in 100 gallons of oil and treat freshly cut frills at anytime of the year. Or mix 8.0 to 10.0 fluid ounces of EH1068 Trimec[®] Ester with 1.0 gallon of oil (diesel oil, No. 1. or No. 2 fuel oil, kerosene, mineral oil, or other oil blends formulated for basal applications). Spray or pour the spray mixture into the frills without runoff.

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 near sensitive plants since small quantities of herbicide drift may cause severe injury. Do
 not apply herbicide when wind speed is sufficient to cause drift.
- Do not apply herbicide when an 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. The use of thickening agents or anti drift additives and drift reducing equipment is of value in preventing spray drift.

ORNAMENTAL LAWNS & TURF (Cool Season Grasses Other Than Bentgrass):

Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

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.

The best results will be obtained from spring or early fall applications when weeds have emerged and 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.

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 wind 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.
- Do not apply this product through any type of irrigation system.

Application Rates - Apply 4 to 6 pints of product in 20 to 260 gallons of water per acre (1.5 to 2.2 fluid ounces in 1 to 6 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 Applicators (CDA) - Controlled droplet applicators allow ultra low spray volumes, and EH1068 Trimec® Ester may be applied at the rate of 4 pints of product per acre (1.5 fluid ounces of product per 1,000 square feet). Avoid overlapping between spray patterns. For the Herbi ULV sprayer, add 1.5 pints of EH1068 Trimec® Ester to 3.5 pints of water and apply this mixture to 16,500 square feet of lawn

Small Area Applications (Not Recommended For Hose End Sprayers) - For spot treatments and small areas, mix EH1068 Trimec® Ester at 1.5 fluid ounces per 1 gallon of water per 1,000 square feet or follow the recommendations for pressure sprayers presented below. Spray emerged weeds that are actively growing at anytime of the season. On newly established lawns, apply EH1068 Trimec® Ester after the grass has been mowed at least 3 times. Do not water the lawn within 24 hours after application and observe use precautions.

Use Rates In Ornamental Lawns And Residential Turf With Hand Operated Sprayers

Amount o	of Product	Amount of Water	Area to be Treated
3 Tablespoons	1.5 fluid ounces	1 Gallon	1,000 Square Feet
6 Tablespoons	3.0 fluid ounces	2 Gallons	2,000 Square Feet
9 Tablespoons	4.5 fluid ounces	3 Gallons	3,000 Square Feet

OPTION (2): Text for Gordon's Brushmaster® Herbicide.

DIRECTIONS FOR USE

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

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: <u>For Plastic Containers</u> - 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. <u>For Metal Containers</u> - 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.

Gordon's Brushmaster® 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.

APPLICATION TIMING 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. Do not cut brush until the herbicide has translocated throughout the plant causing root death.

Basal bark, cut stump, and frill treatments of Gordon's Brushmaster® Herbicide are appropriate during the dormant period before bud growth or any signs of active growth of the mixed brush. However, basal bark treatments may be applied anytime of the year except when water or snow prevents spraying to the ground line.

BRUSH CONTROLLED:				
Ash	Cherry	Oak		
Aspen	Cottonwood	Pine		
Birch	Dogwood	Shortleaf Pine		
Blackberry	Elm	Spruce		
Black Cherry	Gooseberry	Sumac		
Black Locust	Honey Locust	Sycamore		
Brambles	Honeysuckle	Trumpetcreeper		
Buckbrush	Kudzu	Wild Plum		
Cedar	Multiflora Rose	Willow		

<u>.</u> .	PDOADLEAE WEEDS				
	- 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			
Chickweed, common	Lespedeza, common	mallow)			
Chicory	Mallow, common	Veronica (*corn speedwell)			
Cinquefoil	Matchweed	Virginia buttonweed			
Clover	Mouseear chickweed	White clover (*Dutch clover,			
Cocklebur .	Mustard	honeysuckle clover, white trefoil & purplewort)			
Compassplant	Nettle	Wild carrot			
Curly dock	Oxalis (*yellow woodsorrel &	Wild garlic			
Dandelion	creeping woodsorrel)	Wild geranium			
Dayflower	Parsley-piert	Wild lettuce			
Deadnettle	Pennsylvania smartweed (*smartweed)	Wild mustard			
Dock	Pennywort (*dollarweed)	Wild onion			
Dogfennel	Pepperweed	Wild strawberry			
English daisy	Pigweed	Wild violet			
False dandelion (*spotted catsear	Pineappleweed	Yarrow			
& common catsear)	Plantain	Yellow rocket			
Field bindweed (*morningglory & creeping jenny)	Poison ivy				

^{*}Synonyms

BROADCAST FOLIAR APPLICATIONS:

Mixed Brush Applications With Ground Equipment:

For high volume foliar application - Use 1.0 to 2.0 gallons of Gordon's Brushmaster® Herbicide in 100 gallons of water (1.0 to 2.0% volume/volume) and apply as a full cover spray wetting all leaves, stems, and root collars of woody plants. This spray concentration requires a spray volume of 100 to 300 gallons per acre, depending on the height and density of the plants.

Spray Preparation - Add one-half of the required amount of water to the spray tank, then add slowly Gordon's Brushmaster[®] Herbicide with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

Refer to Table 1 for additional spray preparation instructions with water.

Table 1. Quick-mix instructions for preparing 1 to 100 gallons of spray solution at 1.0 to 2.0% concentrations with water for foliar applications.

Spray Solution,	Amounts of Gordon's Brushmaster® Herbicide required		
Gallons	1%	1½%	2%
1	1 ¹ / ₃ fluid ounces	2 fluid ounces	2 ² / ₃ fluid ounces
3	4 fluid ounces	6 fluid ounces	8 fluid ounces
5	6 ² / ₃ fluid ounces	10 fluid ounces	13 ¹ / ₃ fluid ounces
50	½ gallon	¾ gallon	1 gallon
100	1 gallon	1½ gallon	2 gallon

BASAL, CUT SURFACE, AND FRILL APPLICATIONS:

Basal Bark Method - 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. Thorough coverage is required for all basal treatments.

Spray volumes will depend upon the sizes, types and densities of brush present. 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.

Spray Preparation With Oil - Add one-half the required amount of diesel oil (No. 1 or No. 2 fuel oil) to the spray tank, then add Gordon's Brushmaster[®] Herbicide with agitation and complete filling the tank with diesel oil. Mix thoroughly and provide adequate agitation during mixing and spraying. Substitutes for diesel oil include mineral oil, kerosene, and oil blends formulated for basal bark applications. Penetrants appropriate for oil soluble herbicides may improve control.

For Backpack Sprayers, Knapsack Sprayers, and Hand Pump Sprayers - Mix 10.0 fluid ounces of Gordon's Brushmaster® Herbicide with 1.0 gallon of oil (diesel oil, No. 1 or No. 2 fuel oil, kerosene, mineral oil, or oil blends formulated for basal bark applications). Or use the equivalent spray concentration of 8.0% volume/volume.

Refer to Table 2 for additional spray preparation instructions with oil.

Table 2. Quick mix instructions for preparing 1 to 5 gallons of spray solutions with oil for basal bark, cut surface, and frill applications.

Spray Solution, Gallons	Amounts of Gordon's Brushmaster [®] Herbicide required, Fluid Ounces		
1	10 (1¼ cups)		
2	20 (1¼ pints)		
3	30 (1 ⁷ / ₈ pints)		
5	50 (3 ¹ / ₈ pints)		
Equal Measure	s: 8 fluid ounces = 1 cup; 16 fluid ounces = 1 pint		

Cut Surface--Stump Treatment - This method is most effective and economical on stumps with diameters larger than 3 to 4 inches. This treatment can be applied throughout the year except when snow, ice, or water prevents thorough spray coverage.

For Backpack Sprayers, Knapsack Sprayers, and Hand Pump Sprayers - Mix 10.0 fluid ounces of Gordon's Brushmaster® Herbicide with 1.0 gallon of oil (diesel oil, No. 1 or No. 2 fuel oil, kerosene, mineral oil, or other oil blends formulated for basal applications). Refer to Table 2 for spray preparation. Spray thoroughly the cut surfaces, bark, and exposed roots. Treat entire circumference of the tree. Drench until runoff to the soil surface is noticed.

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 10.0 fluid ounces of Gordon's Brushmaster® Herbicide with 1.0 gallon of oil (diesel oil, No. 1. or No. 2 fuel oil, kerosene, mineral oil, or other oil blends formulated for basal applications). Refer to Table 2 for spray preparation. Spray or pour the spray mixture into the frills without runoff.

USE PRECAUTIONS FOR ALL METHODS OF APPLICATION:

- 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 near sensitive plants since small quantities of herbicide drift may cause severe injury. Do
 not apply herbicide when wind speed is sufficient to cause drift.
- ◆ Do not apply herbicide when an 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. The use of thickening agents or anti drift additives and drift reducing equipment is of value in preventing spray drift.

ORNAMENTAL LAWNS AND TURF (Cool Season Grasses Other Than Bentgrass):

Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.

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.

The best results will be obtained from spring or early fall applications when weeds have emerged and 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.

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.

Do not apply this product through any type of irrigation system.

Application Rates - Apply 4 to 6 pints of product in 20 to 260 gallons of water per acre (1.5 to 2.2 fluid ounces of product in 1 to 6 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.

Small Area Applications (Not Recommended For Hose End Sprayers) - For spot treatments and small areas, mix Gordon's Brushmaster® Herbicide at 1.5 fluid ounces per 1 gallon of water per 1,000 square feet or follow the recommendations for hand operated sprayers presented below. Spray emerged weeds that are actively growing at anytime of the season. On newly established lawns, apply Gordon's Brushmaster® Herbicide after the grass has been mowed at least 3 times. Do not water the lawn within 24 hours after application and observe use precautions.

Use Rates In Ornamental Lawns and Residential Turf With Hand Operated Sprayers

Amount o	of Product	Amount of Water	Area to be Treated
3 Tablespoons	1.5 fluid ounces	1 Gallon	1,000 Square Feet
6 Tablespoons	3.0 fluid ounces	2 Gallons	2,000 Square Feet
9 Tablespoons	4.5 fluid ounces	3 Gallons	3,000 Square Feet

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.

GARLON® 4 Herbicide is a registered trademark of Dow AgroSciences, L.L.C. HY-GRADE I™ is a trademark of CWC Chemical, Inc. Arborchem Basal Oil is a product of Arborchem Products Co. Cide-Kick, Cide-Kick II, and JLB Oil Plus are products of JLB International Chemical, Inc. Androc Oil is a product of Habco, Inc.

APPENDIX

- I. Advertising claims that may be presented on the retail container label or on the labeling accompanying the product.
 - A Brush and Broadleaf Herbicide for Noncropland and Turf
 - ♦ Controls ash, aspen, bramble, kudzu, oak, willows, dandelion, chickweed, knotweed, plantain, henbit, spurge and other species of brush and broadleaf weeds.