

2217-709

02-23-2010

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

FEB 23 2010

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

Subject: Label Amendment (revise MSMA compliance dates)  
Quadmec Turf Herbicide  
EPA Reg. No. 2217-709  
Application Dated January 26, 2010

Dear Mr. Kunstman:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of your label is enclosed for your records. This label supercedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after eighteen (18) months from the date of this letter or the next printing of the label, whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Sincerely,

Jim Tompkins  
Product Manager 25  
Herbicide Branch  
Registration Division (7505P)

**ACCEPTED**

FEB 23 2010

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under  
EPA Reg. No. 2217-709

# QUADMEC® TURF HERBICIDE

## EPA Reg. No. 2217-709

### ACTIVE INGREDIENT:

Monosodium acid methanearsonate .....	18.00%
Dimethylamine salt of 2,4-dichlorophenoxyacetic acid .....	5.83%
Dimethylamine salt of (+)-(R)-2-(2-methyl-4-chlorophenoxy)propionic acid .....	2.93%
Dimethylamine salt of dicamba: 3,6-dichloro-o-anisic acid .....	1.46%
OTHER INGREDIENTS: .....	<u>71.78%</u>
TOTAL .....	100.00%

### THIS PRODUCT CONTAINS:

- 1.80 lb monosodium methanearsonate per gallon or 18.00%. Total Arsenic (as elemental) all in water soluble form 8.33%.
  - 0.48 lb 2,4-dichlorophenoxyacetic acid equivalent per gallon or 4.84%
  - 0.24 lb (+)-(R)-2-(2-methyl-4-chlorophenoxy) propionic acid equivalent per gallon or 2.42%
  - 0.12 lb 3,6-dichloro-o-anisic acid equivalent per gallon or 1.21%
- Isomer Specific by AOAC Method.

## KEEP OUT OF REACH OF CHILDREN

## WARNING - AVISO

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

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

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

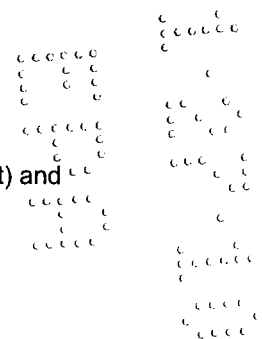
**WARNING:** Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

### Personal Protective Equipment (PPE)

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

All mixers, loaders, applicators and other handlers must wear:

- protective eyewear,
- long-sleeved shirt and long pants,
- shoes and socks, plus
- chemical-resistant gloves (except for applicators using ground boom equipment) and



- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

**User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

**User Safety Recommendations**

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Users should 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.

**First Aid**

<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. 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>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <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 by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or on clothing:</b>	<ul style="list-style-type: none"> <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>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <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.

**Environmental Hazards**

This pesticide is toxic to fish and aquatic invertebrates and may adversely affect non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

**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 worn over short-sleeved shirt and short pants,
- chemical-resistant footwear plus socks,
- chemical-resistant gloves made of any water-proof material,
- chemical-resistant headgear for overhead exposure and
- 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 enter or allow people (or pets) to enter the treated area until sprays have dried.

For use ornamental turfgrass sites and sod farms.

**APPLICATION INFORMATION AND USE PRECAUTIONS:**

Do not apply this product through any type of irrigation system. Do not pour spray solutions near these plants. Do not use a hose end sprayer.

Do not exceed specified dosages for any area. Do not use this product on or near desirable plants, including contact of spray on exposed root systems or adventitious shoots within the drip line of desirable trees and shrubs, since injury may result.

Do not spray while grass is emerging from dormancy. Do not apply to newly seeded turfgrass until after the third mowing. Seed can be sown 3 to 4 weeks after application.

Do not use on St. Augustinegrass, centipedegrass, carpetgrass, red fescues, dichondra, or turf where desirable clovers are present.

Weed control is best achieved when temperatures are above 70°F. However, do not apply this product to Kentucky bluegrass, tall fescue, or turf-type tall fescues when air temperatures exceed 80°F nor when drought conditions exist. Do not apply this product to bermudagrass or zoysiagrass when air temperatures exceed 90°F nor when drought conditions exist.

Be sure soil is moist and lawn healthy before application. Temporary discoloration may occur and high spray volumes may reduce the turf discoloration. If turf is showing stress due to high temperatures and/or drought, irrigation is recommended 2 to 3 days after treatment.

Failure to observe these use precautions may result in injury.

After using this product, clean sprayer with Gordon's® Spray Tank Cleaner and rinse thoroughly with water before applying other pesticides.

Do not apply this product in Florida. Aerial application is prohibited.

**Limitations on broadcast treatments for ornamental turfgrass:**

The maximum application rate is 1.67 gallons of product per acre per application (0.80 lb 2,4-D ae, 0.40 lb MCP-P ae, and 0.20 lb dicamba ae per acre per application). The maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. The maximum seasonal rate is 3.34 gallons of product per acre (1.60 lb 2,4-D ae, 0.80 lb MCP-P ae, and 0.40 lb dicamba ae per acre).

**Application restrictions for golf courses:**

For newly constructed golf courses, one broadcast application is allowed. For all other applications to golf courses, only spot treatments (100 square feet maximum per spot) are allowed. A spot treatment must not exceed 25% of total golf course acreage per year. After December 31, 2013, applications to golf courses are prohibited.

**Limitations on broadcast treatments for sod farms:**

The maximum application rate is 1.67 gallons of product per acre per application (0.80 lb 2,4-D ae, 0.40 lb MCP-P ae, and 0.20 lb dicamba ae per acre per application). The maximum number of broadcast applications is limited to 2 per year with a minimum of 21 days between applications. The maximum seasonal rate is 3.34 gallons of product per acre (1.60 lb 2,4-D ae, 0.80 lb MCP-P ae, and 0.40 lb dicamba ae per acre).

**Application restrictions for sod farms:**

Only 2 broadcast applications are allowed per season. Do not apply within 25 feet of permanent water bodies or aquatic habitat, including, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, and estuaries. After December 31, 2013, applications to sod farms are prohibited.

**ESTABLISHED BERMUDAGRASS AND ZOYSIAGRASS:**

Mix 3 to 5 fluid ounces of Quadmec® Turf Herbicide in 1 to 3 gallons of water for treatment of 1,000 square feet or 1 to 1 2/3 gallons of Quadmec® Turf Herbicide in 50 to 100 gallons of water for treatment of one acre of turf. Better control is obtained by making applications shortly after crabgrass emergence in the spring which will also control surviving winter annual broadleaf weeds and emerged summer annual broadleaf weeds. A second application may be necessary for dense weed populations, especially dallisgrass. Do not apply this product to bermudagrass or zoysiagrass when air temperatures exceed 90°F nor when turf is under stress such as drought.

Zoysiagrass cultivars may vary in the levels of tolerance to applications containing MSMA.

**ESTABLISHED KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS, TALL FESCUE, TURF-TYPE TALL FESCUES (IMPROVED AND LOW GROWING):**

Mix 3 fluid ounces of Quadmec® Turf Herbicide in 1 to 3 gallons of water for treatment of 1,000 square feet of turf or 1 gallon of Quadmec® Turf Herbicide in 50 to 100 gallons of water per acre of turf. Make a second application at the same rate. Make spring applications to newly emerged crabgrass and for broadleaf weed control including oxalis. Summer applications can be made to more mature crabgrass and to broadleaf weeds. Do not apply this product to Kentucky bluegrass, tall fescue, or turf-type tall fescues when air temperatures exceed 80°F nor when turf is under stress such as drought.

Injury from this product may occur to mixed stands of Kentucky bluegrass and red fescues (chewings fescue, creeping fescue, and spreading fescues). If you are unwilling to accept some degree of turf injury, then do not use this product for mixed stands.

**SPOT TREATMENTS FOR ESTABLISHED BERMUDAGRASS, ZOYSIAGRASS, KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS, TALL FESCUE, AND TURF-TYPE TALL FESCUE:**

Mix 3 fluid ounces of Quadmec® Turf Herbicide in 1 gallon of water for treatment of 1,000 square feet of turf. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants. Withhold sprinkling or irrigation for 24 hours after application. Temporary discoloration of the turfgrass may occur.

**Limitations on spot treatments for ornamental turfgrass:**

Spot treatment is defined as a treatment area no greater than 1,000 sq.ft. per acre. The maximum application rate is 3.0 fl.oz. per 1,000 sq.ft. per application (0.25 lb MCPP-p acid equivalent per acre).

**Spray Drift Management**

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of ground application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

**Droplet Size**

Use only Medium or coarser spray nozzles according to ASAE (S 572) definition of standard nozzles or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

**Wind Speed**

Do not apply at wind speeds greater than 10 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind.

**Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

**Susceptible Plants**

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

**Other State and Local Requirements**

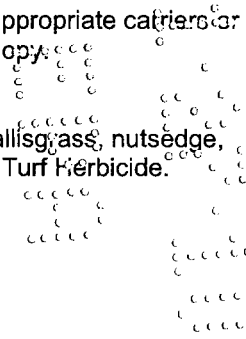
Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

**Equipment**

All ground application equipment must be properly maintained and calibrated using appropriate carrier or surrogates. Do not apply with a nozzle height greater than 4 feet above the crop canopy.

**Weed spectrum**

This product controls a wide variety of problem weed species including crabgrass, dallisgrass, nutsedge, spurge, dandelion and oxalis. Refer to partial list of weeds controlled by Quadmec® Turf Herbicide.



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

\*Synonyms

## STORAGE AND DISPOSAL

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

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

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**[For Plastic Containers – Nonrefillable with capacities equal to or less than 5 gallons:]**

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse [or pressure rinse] container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

[OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**[For Plastic Containers – Nonrefillable with capacities greater than 5 gallons:]**

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse [or pressure rinse] container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

[OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**[For Refillable Containers:]**

**CONTAINER HANDLING:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

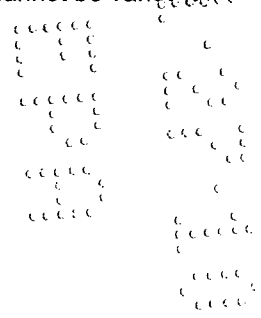
Container cleaning: Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

**LIMITED WARRANTY AND DISCLAIMER**

FOR USE ONLY AS DIRECTED.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. If these terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full. The terms of this LIMITED WARRANTY AND DISCLAIMER cannot be varied by any written or verbal statements or agreements at the point of sale or elsewhere.





## **APPENDIX**

### **1. Statements which may appear on different label components depending on packaging configuration.**

- See next panel for additional Precautionary Statements and First Aid
- Net Contents: \_\_\_\_\_
- EPA Est. No. \_\_\_\_\_

### **2. Advertising claims that may be presented on container labeling, advertisements, brochures, and other marketing/sales promotional materials:**

- For selective control of grass and broadleaf weeds in bermudagrass, bluegrass, tall fescue, turf-type tall fescue, and zoysiagrass turf.
- One gallon covers up to one acre.
- Keep from freezing.
- Shake well before using.
- QUADMEC® and TRIMEC® are registered trademarks of PBI/Gordon Corporation.
- Postemergent Grass & Broadleaf Herbicide

## **DOCUMENT CONTROL INFORMATION**

1. **Unique Label Identifier:** 002217-00709.20100126.notif-proposed-clean.doc

2. **Reason for Issue:** Correct use dates

