

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460 EPA Reg. Number: Date of Issuance:

2217-886

28 MAR 2008

Term of Issuance:

Name of Pesticide Product:

EH-1427 Herbicide

NOTICE OF PESTICIDE:

_ Registration

<u>x</u> Reregistration (under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

PBI/Gordon Corporation 1217 West 12th Street P.O. Box 014090 Kansas City, MO 64101

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA section 4(g)(2)(C) provided you agree in writing to:

- 1. Per the Acute Toxicity review, the First Aid statements should be placed on the label with the "If Swallowed" statement first, followed by the "If in Eyes" statement.
- 2. The glove statement under the PPE section must read "chemical-resistant gloves (except for applicators using groundboom equipment)".
- 3. Per the 2,4-D RED, delete the mechanical transfer engineering control text.
- 4. Delete the text "except as noted on appropriate labels" from the Environmental Hazards statement.
- 5. The early entry PPE must be revised to read:

"Coveralls worn over short-sleeve shirt and short pants."

Chemical-resistant footwear plus socks,

Chemical-resistant gloves made of any waterproof material,

Joanne J. Miller

Chemical-resistant headgear for overhead exposure, and Protective eyewear."

Signature of Approving Official:

Joanne I. Miller

Product Manager 23

Herbicide Branch

Registration Division (7505P)

Date:

28 MAR 2008

EPA Form 8570-6

- 6. The "spray drift management" section on the label is acceptable. However, with the exception of drift-related text appearing in the Environmental Hazards "Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas" and General Precautions and Restrictions "Do not apply this product in a way that will contact workers or other persons, either directly or through drift", all other drift text appearing on the label must be placed together and be located immediately following required text under the "spray drift management" section. Any conflicting text must be deleted from the label.
- 7. Since the Dicamba RED permits a maximum of only 2 applications per year (broadcast or spot treatment), the multiple locations on page 9, 10, 11, and 12 of the label, which indicate a maximum number of 2 broadcast applications, must be revised to indicate that the maximum number of applications of 2.
- 8. On page 8, under Sequential Applications, revise the statement "(or followup applications)" to "(or a followup application)".
- 9. The label must specify a minimum of 21 days between applications for "turf, grown for seed or sod" applications.
- 10. The label must specify a minimum of 30 days between applications for "non-cropland" turf applications.

Submit one copy of the revised final printed label for the record before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Enclosure

nc1d 11/8/07 3 7/6

ACCEPTED with COMMENTS in EPA Letter Dated

2 8 MAR 2008

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

2217-886

EH-1427 HERBICIDE

EPA Reg. No. 2217-886

ACTIVE INGREDIENT:	
2,4-D, dimethylamine salt	12.02%
Quinclorac	5.69%
Dicamba, dimethylamine salt	1.38%
Sulfentrazone	
INERT INGREDIENTS:	
TOTAL	

THIS PRODUCT CONTAINS:

0.88 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 9.98%

0.50 lbs. 3,7-dichloro-8-quinolinecarboxylic acid per gallon or 5.69%

0.10 lbs. 3,6-dichloro-o-anisic acid equivalent per gallon or 1.15%

0.06 lbs. N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl] phenyl]methanesulfonamide per gallon or 0.69%

Isomer Specific By AOAC Methods.

U.S. Patent 6,849,579

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en cetaile. (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

CAUTION: Causes moderate eye injury. Avoid contact with eyes or clothing. Harmful if swallowed.

Personal Protective Equipment (PPE)

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

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

- · long-sleeved shirt and long pants.
- · shoes and socks, plus
- chemical- resistant gloves when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
- chemical -resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.



Kansas City, Missouri 64101

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.

Engineering Control Statements

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

Containers of 5 or more gallons: 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. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4)], the handler PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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.

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. Call a poison control center or doctor for treatment advice.
Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control center or doctor for treatment advice.

Environmental Hazards

This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark except as noted on appropriate labels. 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 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. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- · coveralls,
- · chemical-resistant gloves made of any water-proof material,
- · shoes plus socks and

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.

Reentry Statement: Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

PRODUCT DESCRIPTION:

4 in 1 Herbicide

EH-1427 Herbicide is a patented product that contains four (4) active ingredients including quinclorac and sulfentrazone that broaden the spectrum of weed control. EH-1427 Herbicide is a versatile herbicide that will control many troublesome grassy and broadleaf weeds in established turfgrass when used as directed.

4 in 1 is better than 3 in 1

- Versatile post-emergent herbicide for turfgrass to control both grassy and broadleaf weeds.
- Wide window of application for broadleaf weeds beginning at emergence and active weed growth.
- Quinclorac is absorbed by foliage and roots and translocated throughout the plant where it uses
 multiple modes of action to control both grassy and broadleaf weeds. One mode of action involves
 an auxin-type herbicidal activity which disrupts plant growth in broadleaf weeds, while another mode
 of action works as an enzyme/cell wall disruptor to control crabgrass and other grassy weeds.
- The effects on grassy weeds include stunting, chlorosis, gradual reddening and followed by necrosis. Symptoms typically appear 7 to 14 days after application.

- The symptoms of susceptible broadleaf weeds resemble those of 2,4-D and include leaf and stem curl or twisting, and chlorosis.
- Sulfentrazone provides post emergent weed control for common weed species in turfgrass such as spurge. Foliar contact of sulfentrazone on emerged, susceptible weeds results in rapid dessication and necrosis of the plant tissue.

WHERE TO USE:

This product provides selective broadleaf control in warm-season and cool-season turfgrass in five (5) use sites. See tables 2 and 3 below for turf grass species that can be treated with EH-1427 Herbicide.

- Residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.
- Ornamental sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, fairgrounds, areas adjacent to athletic fields and paved areas.
- Institutional sites are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses (fairways and roughs), and office buildings.
- **Non-cropland sites** include Highway rights-of-way (principal, interstate, county, private, and unpaved roads); roadsides, roadside ditches, road shoulders, road embankments, dividers and medians; municipal, state and federal lands; airports and military installations.
- Agricultural site: Commercial sod production

Prohibitions of 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 (non-cropland 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.
- Do not apply product to bare ground.
- DO NOT apply EH-1427 Herbicide to the following:

Bahiagrass

Bentgrass, (creeping, 'Seaside', 'Colonial')

Carpetgrass

Centipedegrass

Dichondra

St. Augustinegrass

Greens, tees and collars at golf courses

Lawns with desirable clovers or legumes

Ornamentals (flowers, trees, groundcovers, landscape beds and shrubs)

Turfgrass tolerance:

- Turfgrass tolerance to this product may vary, and temporary turfgrass yellowing may occur on hybrid bermudagrass and the fine fescues.
- Tolerant turf species listed on this label may exhibit temporary turf injury. The best tolerance occurs under optimal conditions for the turfgrass. Adverse environmental conditions may reduce the selectivity on the turfgrass. Injury may occur under marginal conditions (e.g. low temperatures and drought stress) or under extreme conditions (e.g. high temperatures and high humidity). To avoid turf injury, use only on turfgrass that is reasonably free of stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, low soil pH, nematodes, improper mowing or improper applications of fertilizer and pesticides. Under any of these stress conditions, any turf damage caused by the use of this product is beyond the control of PBI/Gordon Corporation and all risk is assumed by the buyer and/or user.

- Certain spray tank additives (adjuvants, wetting agents, surfactants), liquid fertilizers, and tank
 mixtures containing emulsifiable concentrates may reduce the selectivity on the turfgrass. Use
 adjuvants and spray additives or tank-mix combinations only when your experience indicates that the
 tank mixture will not result in objectionable turf injury. [optional text: See "SPRAY PREPARATION:
 Additions of adjuvants (and/or Tank Mixtures) to improve Grassy Weed Control:" section of this label.
 End of optional text]
- Do not broadcast apply this product when temperatures are above 90°F; some injury can also be expected with spot treatments when air temperatures exceed 90°F.

CULTURAL TIPS:

For newly seeded areas:

Delay application of this product to grass seedlings until after the second or third mowing, or 28 days after emergence.

For newly sodded, sprigged, or plugged areas:

The application of this product to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations.

Seeding:

Turf species listed on this label can be seeded into the treated areas at four (4) weeks after the application of this product.

Irrigation:

Do not apply this product immediately before rainfall or irrigation. For best results, do not irrigate or water the turfgrass within 24 hours after application. If dry conditions exist, a scheduled irrigation or watering 24 hours before and 24 hours after application is recommended. If rainfall does not occur in 2 to 7 days after application, irrigation of at least one-half inch is recommended.

Mowing:

Delay mowing 2 days before and until 2 days after the application of this product. Additional stress from low mowing heights may increase the possibility of turf injury. Clippings from the first three mowings should be left on the treated area. Do not use these clippings as mulch or compost around flowers, ornamentals, trees, or in vegetable gardens.

SPRAY PREPARATION:

Mixing with Water:

Add one-half the required amount of water to the spray tank, then add EH-1427 Herbicide slowly with agitation, and complete filling the tank with water. Mix thoroughly and continue agitation while spraying.

When this product is left standing for extended periods of time, re-agitate to assure uniformity of the spray mixture.

Mixing with Liquid fertilizers:

In certain applications, liquid fertilizer may replace part of the water as a diluent.

ALWAYS PREMIX EH-1427 Herbicide <u>WITH</u> WATER BEFORE ADDING TO FLUID FERTILIZERS. For liquid nitrogen solutions such as U.A.N. or urea solutions, use a premix of 1 part of this product with 4 parts of water or use a premix with a 1:4 ratio of product to water. For other fluid fertilizers such as suspensions, use a premix of 1 part of this product with 50 to 60 parts of water. Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers. Always perform a jar test for compatibility before large scale mixing.

The jar test can be conducted by mixing all components in a small container in proportionate quantities. If the mixture separates after standing and can be mixed readily by shaking, then the mixture can be used and applied with spray equipment providing continuous agitation. If large flakes, sludge, gels or other

precipitates form, or if a separate oily layer or oil globules appear, then the herbicide and the liquid fertilizer should not be prepared as a tank mixture.

[Optional additional text]

Additions of Adjuvants (and/or Tank Mixtures) to Improve Grassy Weed Control:

Methylated seed oil is a suitable adjuvant for post-emergent applications and may cause slight yellowing to desirable turf. Liquid and chelated irons or sprayable can reduce the slight yellowing that may occur on some turfgrass species. Methylated seed oil used must meet the following criteria:

- Be non-phytotoxic
- Contain only EPA-approved ingredients
- · Provide good mixing quality in the jar test, and
- Be used only when your experience indicates that this tank mixture will not result in objectionable turfgrass injury.

Do not include additives when tank-mixing with oil-based products or EC (Emulsifiable Concentrate) products as this may cause phytotoxicity (yellowing) of desirable turfgrass. Other additives or adjuvants may be used, however, certain additives may reduce the selectivity on the turfgrass. Under some environmental conditions some of these products may cause phytotoxicity (yellowing) of desirable turfgrass. Use these adjuvants, spray additives or tank-mix combinations, only when your experience indicates that the tank mixture will not result in objectionable turf injury. [end optional text]

GROUND EQUIPMENT:

Spray equipment: Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage.

Hand-operated sprayers including backpack sprayers, compression sprayers, and knapsack sprayers are appropriate for small turfgrass areas when power equipment is unavailable, uneconomical, or impractical. Calibration and proper application are essential when using this product.

Cleaning spray equipment: Clean sprayer before and after using this product. Use soap, household ammonia, detergent and water, or an approved spray tank cleaner and rinse thoroughly. Cross-contamination may cause physical incompatibility (mixing problems) or result in turf injury.

Spray distribution:

- The accuracy and uniformity of the herbicide distribution is the sole responsibility of the applicator.
- Uniform applications are essential when using this product. Over-application, excessive overlaps, or rates above those specified on this label can cause turf injury.
- Avoid spray overlaps with hand-held equipment: Wands fitted with flat fan nozzle tips may be used
 with the appropriate technique. Flat fan nozzles should not be waved in a back-and-forth motion, or in
 a side-to-side motion, or in a swinging arm motion. Instead, the nozzle should be held stationary at
 the proper height. Side-to-side motion results in uneven coverage. To avoid excessive spray pattern
 overlaps, use a spray colorant.
- This product may cause injury to susceptible/non-target plants at the use site by contacting the foliage, stems, or roots. To prevent injury to susceptible crops and other desirable broadleaf plants including but not limited to cotton, legumes, tobacco, tomatoes, garden/vegetable crops, and ornamentals (flowers, trees, and shrubs) avoid contact with the spray solution, spray droplets, and spray mist (fine droplets). Applications are recommended only when there is no potential hazard from spray drift during dormant and active growth periods.

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

Aerial application: Do not apply as an aerial application.

Spray Drift Management

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

Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors ontarget deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

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 carriers or surrogates.

Additional requirements for ground boom application: Do not apply with a nozzle height greater than 4 feet above the turf canopy.

POST EMERGENT CONTROL OF GRASSY WEEDS

EH-1427 Herbicide can provide post emergent control and suppression of certain grassy weeds and yellow nutsedge in turfgrass. Apply this product to weeds that are young and actively growing for best results (see Table 1). Applications under adequate soil moisture conditions are preferred to summer treatments as generally, applications in the summer to older, drought stressed weeds are less effective.

Broadcast or spot treatments with single or sequential applications will control or suppress these grassy weeds:

Crabgrass, (large and smooth)

Foxtail, (green, yellow and giant)
Signalgrass, (broadleaf)
Barnyardgrass
Nutsedge, (yellow) [optional: suppression]

Weed Control is affected by the spray volume, spray schedule and the weed growth stages. Generally, apply this product to actively-growing weeds during the early growth stages for the best results.

SPRAY VOLUMES: IMPORTANT - Use 50 to 220 gallons per acre (1.2 to 5.0 gallons per 1,000 sq.ft.) with spray pressures adjusted to between 20 to 40 psi. Use higher spray volumes for dense weed populations (up to 220 gallons per acre or 5 gallons per 1,000 square feet).

SPRAY SCHEDULE: Use single applications for light infestations and sequential applications for dense infestations. The use rates for single and sequential applications are presented in Table 2.

Sequential applications: Sequential (or followup applications) if needed as either broadcast or spot treatments should be made between 14 to 21 days after the initial application on ornamental turfgrass and are recommended for more mature weeds, for dense infestations and for adverse environmental conditions. Other situations which may indicate the need for sequential applications include:

- Under certain conditions, applications of this product at the 3 to 4 tiller stage of the annual grasses may not provide complete control.
- All weed grasses do not germinate at the same. The period of germination for crabgrass and annual
 grasses can extend into the summer after the initial application of this product and results may be
 poor and erratic.
- Dense infestations of weeds may prevent thorough spray coverage of the target weeds and regrowth occurs
- Biotypes of large and smooth crabgrass in California have shown varied response to quinclorac. If control failure occurs following a sequential application, do not reapply this product. Change to a herbicide with a different mode of action such as Gordon's Trimec Plus Post-Emergent Grass & Broadleaf Herbicide [or brandname X product].

Extremes in environmental conditions, ie. temperature and moisture, soil conditions, and cultural practices may affect the activity of this product. Under warm moist conditions, herbicide symptoms may be accelerated. Under dry conditions, the expression of herbicide symptoms is generally delayed, and weeds hardened off by drought may be less susceptible to this product.

If objectionable turf injury occurs with the first application under a sequential program, then avoid making the second application of this product until the turfgrass recovery is complete.

Do not broadcast apply this product when temperatures are above 90°F; some injury can also be expected with spot treatments when air temperatures exceed 90°F.

California: Make broadcast applications only between March 1 and September 1. If troublesome weeds appear during other times of the year, a spot application can be made. While irrigation is necessary and important for plant growth, apply irrigation water efficiently so that no more than 125% of the net irrigation requirement is applied for any irrigation event. Apply efficient irrigations for six months following application of sulfentrazone containing products.

WEED GROWTH STAGES: See Table 1 below for the optimum weed growth stage to treat for best control and efficacy.

Weed species	1 to 3 leaf	4 to 5 leaf (1 tiller)	6 leaf (2 tillers)	7 leaf (3 tillers)	8 leaf (4 tillers)
Barnyardgrass Crabgrass, (large and smooth) Foxtail, (green, yellow and giant) Signalgrass, (broadleaf)	×	х	. · · · · · · · · · · · · · · · · · · ·	Footnote 1	Footnote 1 (reduced control)
Nutsedge, (yellow) ^[2]	Х	Footnote 1	Footnote 1	Footnote 1	Footnote 1 (reduced control)

¹Sequential application on ornamental turfgrass may be required at 14 to 21 days with a maximum of two broadcast applications per year.

[Optional: ²Suppression only of young and actively growing yellow nutsedge. Sequential application may be required at 14 to 21 days with a maximum of two broadcast applications per year.]

Turf Species EH-1427 Herbicide Can be Used On			
Cool-Season Turf: Kentucky Bluegrass, Perennial ryegrass, Fescues, Annual Bluegrass (Poa annua), Rough Bluegrass (Poa trivialis), Annual Ryegrass	Warm-Season Turf: Bermudagrass (Hybrid & Common), Zoysiagrass, Buffalograss	· · · · · · · · · · · · · · · · · · ·	

Do not apply this product to warm-season turfgrass during spring green-up or in the fall during transition period between active growth and dormancy.

Dormant turf: This product may be applied to fully dormant bermudagrass, fully dormant zoysiagrass, and fully dormant buffalograss

Single and Sequential Application Details:

Application schedule	Maximum Rate per Application	Recommended Spray Volume*	Maximum number of broadcast applications	Application Interval, days
Single	7 to 8 pints/A (0.84 lb 2,4-D ae/A) or 2.6 to 3.0 fl. oz./1000 sq. ft.	50 to 220 gal/A or 1.2 to 5.0 gal/1000 sq.ft.	2	
Sequential Ornamental turfgrass	7 to 8 pints/A (0.84 lb 2,4-D ae/A) or 2.6 to 3.0 fl. oz./1000 sq. ft.	50 to 220 gal/A or 1.2 to 5.0 gal/1000 sq.ft.	2	14 to 21 days
Sequential Sod farms	7 to 8 pints/A (0.84 lb 2,4-D ae/A) or 2.6 to 3.0 fl. oz./1000 sq. ft.	50 to 220 gal/A or 1.2 to 5.0 gal/1000 sq.ft.	2	21 days

ae = Acid Equivalent. Do not exceed the maximum seasonal rate of 16 pints (1.76 lb 2,4-D ae) per acre per season, excluding spot treatments. Minimum spray volume to be used is 10 gal/A.
* Note: Use the higher spray volumes for dense weed populations.

SPOT TREATMENTS FOR GRASSY WEEDS AND YELLOW NUTSEDGE:

- Calibration and proper application are essential when using this product. Spray coverage should be uniform and complete.
- Over applications can result in turfgrass injury.
- Mix 2.6 to 3.0 fl. oz. of this product with a minimum of 1.0 gallons of water for treatment of approximately 1,000 sq. ft of turfgrass. Apply to actively growing weeds during the early growth stages as shown in Table 1.

TANK MIXTURES FOR GRASSY WEEDS

Pre-emergent herbicides with residual activity for crabgrass and annual grasses: This product can be tank-mixed with EPA-registered preemergent herbicides (if compatible) to provide extended preemergent control. Do not exceed the specified dosage rates.

Physical incompatibility, reduced weed control or turf injury may result from mixing this product with other pesticides (fungicides, herbicides and insecticides) adjuvants, additives, or fertilizers. Refer to manufacturer's labels for specific use directions, precautions and limitations before tank mixing with this product and follow those that are most restrictive.

Post-emergent herbicides for grassy control: DO NOT tank mix this product with other post-emergent herbicide EPA-registered for grassy control in turfgrass. If this product is used in combination beyond these Directions for Use, then PBI/Gordon Corporation will have no liability for any loss, damage, or injury resulting from an unspecified combination.

NOTE: The most restrictive labeling applies to any tank mixture. Consult tolerant turfgrass species on all labels. Separate applications should be made if all target weeds are not at the correct growth stage for treatment at the same time.

POST EMERGENT CONTROL OF BROADLEAF WEEDS:

Apply this product to broadleaf weeds that are young and actively growing for the best results. Spring and fall treatments under adequate soil moisture conditions are preferred to the summer treatments. Generally, summer broadcast applications to older, drought stressed weeds are less effective. Fall applications provide improved control for emerged winter annuals and perennials such as henbit, chickweed, clover and ground ivy.

Sequential application: Sequential (or follow-up) applications as broadcast or spot treatments at a 14 to 21 day interval on ornamental turfgrass are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions. The maximum number of broadcast applications per treatment site is 2 per year.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of this product. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to this product.

Do not broadcast apply this product when temperatures are above 90°F, some injury may be expected with spot treatments when air temperatures exceed 90°F.

HOW MUCH TO USE:

See Table 3 for use rates and spray volumes for post-emergent application to broadleaf weeds. Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. 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 hardened off or more mature.

Table 3. USE RATES FOR BROAD	LEAF WEEDS IN TURF	`
Turf Species		
Cool-season Turf:	Warm-season Turf:	
Kentucky bluegrass,	hybrid bermudagrass,	· ·
perennial ryegrass,	common bermudagrass	
Fescues,	zoysiagrass,	
Annual bluegrass (Poa annua)	buffalograss	
rough bluegrass (Poa trivialis)		

Do not apply this product to warm-season turfgrass during spring green-up or in the fall during the transition period between active growth and dormancy

Dormant turf: This product may be applied to fully dormant bermudagrass, fully dormant zoysiagrass and fully dormant buffalograss.

Sin	gle an	d Sec	Juential	Ap	plications

annual ryegrass

Application schedule	Maximum Rate per Application	Recommended Spray Volume*	Maximum number of broadcast applications	Application Interval, days
Single	7 to 8 pints/A (0.84 lb 2,4-D ae/A) or 2.6 to 3.0 fl. oz./1000 sq. ft.	20 to 220 gal/A or 1.2 to 5.0 gal/1000 sq.ft.	2	
Sequential Ornamental turfgrass	7 to 8 pints/A (0.84 lb 2,4-D ae/A) or 2.6 to 3.0 fl. oz./1000 sq. ft.	20 to 220 gal/A or 1.2 to 5.0 gal/1000 sq.ft.	2	14 to 21 days
Sequential Sod farms	7 to 8 pints/A (0.84 lb 2,4-D ae/A) or 2.6 to 3.0 fl. oz./1000 sq. ft.	20 to 220 gal/A or 1.2 to 5.0 gal/1000 sq.ft.	2	21 days

ae = Acid Equivalent. Do not exceed the maximum seasonal rate of 16 pints (1.76 lb 2,4-D ae) per acre per season, excluding spot treatments. Minumum spray volume to be used is 10 gal/A.

* Note: Use the higher spray volumes for dense weed populations.

SPOT TREATMENTS FOR BROADLEAF WEEDS:

- Calibration and proper application are essential when using this product. Spray coverage should be uniform and complete.
- Over applications can result in turfgrass injury.
- Mix 2.6 to 3.0 fl. oz. of this product per one (1.0) gallon of water for treatment of approximately 1,000 sq.ft of turfgrass. Apply any time the emerged broadleaf weeds are actively growing.

WEEDS CONTROLLED:

EH-1427 Herbicide will control or suppress the following. Apply when weeds are young and actively growing.

WEEDS			
Aster, white heath & white	English Daisy ¹	Mallow, common	Shepherdspurse
prairie	False dandelion (*spotted	Matchweed	Signalgrass ¹
Bedstraw	catsear & common catsear)	Morningglory spp.	(Broadleaf)
Beggarweed, creeping	Field bindweed	Mouseear chickweed	Speedwell *Veronica
Bindweed	(*morningglory & creeping	Nutsedge, yellow ³	(Common, Slender
Black medic	jenny)	Old world diamond flower	and Thymeleaf)
Broadleaf plantain	Field oxeye-daisy (*creeping	Oxalis (*yellow woodsorrel &	Spurge
Buckhorn plantain	oxeye)	creeping woodsorrel)	Thistles
Bull thistle	Filaree, whitestem & redstem	Parsley-piert	Virginia buttonweed
Burdock, common	Florida betony	Pennsylvania smartweed	White clover (*Dutch
Buttercup, creeping	Florida pusley	Pepperweed	clover, honeysuckie
Carpetweed	Foxtail ¹	Pigweed	clover, white trefoil, &
Chickweed, common	(green, yellow and giant)	Pineappleweed	purplewort)
Chicory	Ground ivy	Plantain	Wild carrot
Cinquefoil	Groundsel	Poison ivy	Wild garlic
Clovers	Geranium (Carolina)	Poison oak	Wild geranium
Crabgrass ^{1, 2}	Hawkweed	Prickly lettuce (*compass	Wild lettuce
(large and smooth)	Healall	plant)	Wild mustard
Curly dock	Henbit	Puncturevine	Wild onion
Dandelion	Innocence (Blue-eyed Mary)	Purple cudweed	Wild strawberry
Dayflower	Knotweed	Purslane	Wild Violet ¹
Deadnettle	Lambsquarters	Ragweed	Yarrow
Dock	Lawn burweed	Redweed	Yellow rocket
Dogfennel	Lespedeza, common	Red sorrel (*sheep sorrel)	·Ĭ
Dollarweed (*pennywort)	1.	ļ	and many more
	<u> </u>		broadleaf weeds

^{*}Synonyms

[Optional: ³Suppression only of young and actively growing yellow nutsedge. Sequential application may be required at 14 to 21 days in ornamental turfgrass with a maximum of two broadcast applications per year.]

STORAGE AND DISPOSAL

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

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

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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 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.

Sequential application may be required at 14 to 21 days with a maximum of two broadcast applications per year.

²Biotypes of large and smooth crabgrass in California have shown varied response to quinclorac. If control failure occurs following a sequential (or follow-up) application, do not reapply this product. Change to a herbicide with a different mode of action such as [XXX-XXX or Gordon's Trimec Plus post-emergent grassy & broadleaf herbicide (EPA Reg. No. 2217-709)].

LIMITED WARRANTY AND DISCLAIMER

IMPORTANT: Read this LIMITED WARRANTY AND DISCLAIMER before buying or using this product. By opening and using this product, buyer and all users agree to accept the terms of this LIMITED WARRANTY AND DISCLAIMER in their entirety and without exception. If the terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full.

It is impossible to eliminate all risks inherently associated with use of this product. Damage to the treated article, ineffectiveness, or other unintended consequences can result from use of the product under abnormal conditions such as weather, presence of other materials, or the manner or use of application, etc. Such factors and conditions are beyond the control of the manufacturer, and BY PURCHASING AND USING THIS PRODUCT THE BUYER AND ALL USERS OF THIS PRODUCT AGREE TO ACCEPT ALL SUCH RISKS. Buyer and all users further agree to assume all risks of loss or damage from the use of the product in any manner that is not explicitly set forth in or that is inconsistent with label instructions, warnings and cautions.

The manufacturer warrants only that this product conforms to the chemical description given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use, subject to the inherent risks described below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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 HEREBY EXPRESSLY DISCLAIMED.

THE EXCLUSIVE REMEDY OF BUYER AND ALL USERS OF THIS PRODUCT, AND THE EXCLUSIVE LIABILITY OF THE MANUFACTURER, FOR ANY AND ALL LOSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OF HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. 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 THE PRODUCT. The Manufacturer must be promptly notified in writing of any claims, whether based in contract, tort, negligence, strict liability, or otherwise, to be eligible to receive either remedy stated above.

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. No employee or agent of the manufacturer or seller is authorized to vary or exceed the terms of this LIMITED WARRANTY AND DISCLAIMER in any manner.

Appendix

1. 3	Statements which may appear on different label components depending on packaging
CO	nfiguration.
	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:
 - · Water-based formula

- Water-based formulation
- Proven performance
- Consistently fast control on tough weeds like dandelion, spurge, clover, plantain, ground ivy and [various other listed weeds].
- · Controls grassy and broadleaf weeds "All-In-One"
- "Four-In-One" or "4-in-1"
- Controls crabgrass, foxtail and signalgrass
- From the makers of Trimec® herbicides.
- Trimec® is a registered trademark of PBI/Gordon Corporation.
- For information call XXX-XXXX [contact www.xxx-xxxx.com]
- ProForm™ logo presented on the containers



- Post-emergent yellow nutsedge suppression, crabgrass control, plus broadleaf weeds—FAST!
- For use on: Bluegrass, Fescues, Perennial Ryegrass and Annual Ryegrass
- Versatile post-emergent control of both grassy and broadleaf weeds
- Yellow nutsedge suppression
- · Crabgrass and foxtail control
- Wide window of application for broadleaf weeds
- Foliar application
- Protox inhibitor activity for rapid desiccation and death of broadleaf weeds.
- Fast visual response
- Suitable for applications up to 90° [degrees] F
- Easy To Use Water-Based Formulation
- Water based

DOCUMENT CONTROL INFORMATION

1. Unique Label Identifier: 002217-00886.20071105

2. Previous Version: AP020306

3. Reason for Issue: Various changes pertaining to re-registration. Re-format label.