



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

## NOTIFICATION

OPECLO PREVENTION PESTICIDES AND TOXIC SURSTANCES

FEB 0 9 2007

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James L. Kunstman, Ph.D. Director of Regulatory Services PBI/Gordon Corporation P.O. Box 014090 Kansas City, MO 64101

SUBJECT: Applications for Pesticide Notification - CA DPR Statements

EH-1406 Herbicide EPA Reg. No. 2217-867 EH-1415 Professional EPA Reg. No. 2217-882 EH-1415 Weed and Feed EPA Reg. No. 2217-883 ✓EH-1427 Herbicide EPA Reg. No. 2217-886 EH-1425 Herbicide EPA Reg. No. 2217-888

Applications Dated January 18, 2007

#### Dear Dr. Kunstman:

The Agency is in receipt of your Applications for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above products. The Registration Division (RD) has conducted a preliminary screen of these requests for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The labels submitted with the applications have been stamped "Notification" and will be placed in our records.

If you have any questions, please me directly at 703-305-6249 or Terri Stowe of my staff at 703-305-6117.

Sincerely,

Linda Arrington

Notifications & Minor Formulations Team Leader

Registration Division (7505P)

Office of Pesticide Programs

Please read instructions on re	everse before complet	ing form.		Form App	oroved.	OMB No	. 2070-006	0. Approval Expires 2-28-95
<b>⊕</b> EPA		United States ental Protecti ashington, DC 204		;y		Registr Amend Other		OPP Identifier Number
		Application f	or Pestic	de - Sect	ion l			
1. Company/Product Num	· · · · · · · · · · · · · · · · · · ·			A Product Ma Joanne	nager	er	3.	Proposed Classification
4. Company/Product (Nan			PM#	DU# [57]			ਗ □	
, , , , , , , , , , , , , , , , , , ,	1-1427 Herbicide		1	oduct Mana	ger—	Team 2	3	None Restricted
5. Name and Address of Applicant (Include ZIP Code) PBI/Gordon Corporation Post Office Box 014090 Kansas City, Missouri 64101 Check if this is a new address			6. <b>Ex</b> (b)(i), EPA I	Product Manager—Team 23  6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No.  Product Name				mposition and labeling to:
	0 10 4 11011 444.000		Section -	ll	······································			
Amendment - Explain Resubmission in responsible Notification - Explain by	onse to Agency letter o			Final printed Agency letter "Me Too" App Other - Expla	dated olication	ı.		NOTIFICATION FEB 0 9 2007
Notification Per Pesticide Registration Notice (PRN) 98-10:  Please refer to cover letter describing adoption of CPDR recommendations for irrigation schedules.  This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or Confidential Statement of Formula of this product. I understand that it is a violation of 18 U.S.C Sec. 1001 to willfully make any false statement to the EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Section 12 and 14 of FIFRA.								
		S	ection -	11			****	
1. Material This Product Will	Be Packaged In:							
Child-Resistant Packaging Yes* No	Unit Packaging Yes No	\ \   [	Vater Soluble F Yes No	ackaging	2	Met		
* Certification must be submitted	If "Yes" Unit Packaging wgt.		"Yes" ackage wgt.	No. per container		Gla Par Oth		()
3. Location of Net Contents In:  Label Conta		4. Size(s) Retail Co	ontainer			Label	bel Direction	ons lying product
6. Manner in Which Label is Affixed to Product Lithograph Other								
Section - IV								
1. Contact Point (Complete ite	ms directly below for it		dual to be cont	acted, if necess	sary, to	process t		
Name James L. Kunstman, Ph.D.  Title Director of Regulatory Services  Telephone No. (Include Area Code) 816-460-6292								
l acknowledge that any ki both under applicable law 2. Signature	I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.  I acknowledge that any knowingly false or misleading statement may be punishable by fine or Imprisonment or both under applicable law.  Securate and complete.  Fine certify that the statements I have made on this form and all attachments thereto are true, accurate and complete.  Gramped							
_	unstman, Ph.D.	5. Dat		ry 18, 2007				
EPA Form 8570-1 (Rev. 3-94)	PA Form 8570-1 (Rev. 3-94) Previous editions are obsolete. White - EPA File Copy (original) Yellow - Applicant Copy							





An Employee-Owned Company

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January 18, 2007

Document Processing Desk (AMEND)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501
Attn: Ms. Joanne I. Miller, PM -23

NOTIFICATION FEB 0 9 2007

Dear Ms Miller:

Subject: Notification request for five product registrations

I. Notification request: Revisions to Directions for Use based upon the review of California Department of Pesticide Regulation (DPR).

Five product registrations were submitted by PBI/Gordon Corporation for review to California Department of Pesticide Regulation (DPR). John S. Sanders, Ph.D., Chief of the Environmental Monitoring Branch, proposed mitigation measures for the use of sulfentrazone on turfgrass. We ask to adopt the instructions for irrigation schedules and to include the application window for broadcast applications as recommended by DPR. Please refer to the annotated text in the Directions for Use.

# II. Grouping of registrations:

Grouping to aid your review: PBI/Gordon Corporation has grouped five pesticide registrations into one group or batch. Our criteria for this group included the multiple active ingredients containing sulfentrazone and the consistency of the proposed labeling revisions. We are submitting concurrently these five (5) amendments for these product registrations to aid your review.

EH-1415 Professional (EPA Reg. No. 2217-882), CA ID# 217636

EH-1415 Weed and Feed (EPA Reg. No. 2217-883), CA ID#21762

EH-1427 Herbicide (EPA Reg. No. 2217-886), CA ID#217014

EH-1406 Herbicide (EPA Reg. No. 2217-867)

EH-1425 Herbicide (2217-888), CA ID#217015

One (1) copy of the draft labeling for the listed registrations are enclosed for your review.

## III. Certification:

This notification is consistent with the provisions of <u>PR Notice 98-10</u> and EPA regulations at 40 <u>CFR</u> 152.46, and no other changes have been made to the labeling or Confidential Statement of Formula of this product. I understand that it is a violation of 18 U.S.C Sec. 1001 to willfully make any false statement to the EPA. I further understand that if this notification is not consistent with the terms of <u>PR Notice 98-10</u> and 40 <u>CFR</u> 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Section 12 and 14 of FIFRA.

#### IV. Enclosures:

The administrative portion of this application includes the following:

- 1. Application for Pesticide Amendment (EPA Form 8570-1).
- 2. One (1) copy of the draft labeling for each registration.

Please contact me at 816-460-6292 or via e-mail at <u>jkunstman@pbigordon.com</u> if you have questions concerning this submission.

Sincerely,

James L. Kunstman, Ph.D.

Director of Regulatory Services

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# **EH-1427 HERBICIDE**

NOTIFICATION FEB 0 9 2007

ACTIVE INGREDIENTS:	ACTI	VE IN	IGRED	IENTS:
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2,4-D, dimethylamine salt	12.02%
Quinclorac	5.69%
Dicamba, dimethylamine salt	1.38%
Sulfentrazone	0.69%
INERT INGREDIENTS:	80.22%
TOTAL	100.00%

#### THIS PRODUCT CONTAINS:

- 0.88 lb. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 9.98%
- 0.50 lb. 3,7-dichloro-8-quinolinecarboxylic acid per gallon or 5.69%
- 0.10 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 1.15%
- 0.06 lb. 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 Method.

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 detalle. (If you do not understand the label, find someone to explain it to you in detail).

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

NET CONTENTS: ONE QUART, 1, 2.5, 15, 30, 55 and 275 U.S. GALLONS

AP-----EPA Reg. No. 2217-886 EPA Est. No. 2217- KS-1 MANUFACTURED BY:

An Employee-Owned Company
1217 West 12th Street
Kaness City, Missoun 64101

Telephone: 1-800-821-7925

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

#### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans & Domestic Animals**

**CAUTION:** Causes moderate eye injury. Avoid contact with eyes or clothing. Wear protective eyewear. Harmful if swallowed. When using this product, wear long-sleeved shirt, long pants, socks, shoes and rubber gloves. It is recommended that safety glasses include front, brow and temple protection.

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

#### **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.

- · Wash thoroughly with soap and water after handling.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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**

If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
	ct container or label with you when calling a poison control center or doctor or going ou may also contact 1-888-800-5556 for emergency medical treatment information.

# **ENVIRONMENTAL HAZARDS:**

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater.

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills.

#### **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.

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, wear:

- Coveralis
- Chemical-resistant gloves made of any waterproof material
- · Shoes plus socks
- 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.

**Reentry Statement:** Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has 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, aprons, 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 chi, 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/Cordon 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 WATER BEFORE ADDING TO FLUID FERTILIZERS</u>. 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.

Plo

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 lar 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. Do not apply when conditions are conducive to spray drift from the use site to untreated areas.

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

Aerial application: Do not apply as an aerial application.

#### SPRAY DRIFT MANAGEMENT:

Do not apply under circumstances where possible drift to unprotected persons or to food, forage or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. For ground boom applications, use medium or coarser spray nozzles according to ASAE 572 definition for standard nozzles or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles.

Make ground applications when the wind velocity favors on-target product deposition. Apply only when the wind speed is less than or equal to 10 mph. For all ground applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

Do not make ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.

All ground application equipment must be properly maintained and calibrated using appropriate carriers

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop 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 grass weeds:

Crabgrass, (large and smooth)

Foxtail, (green, yellow and giant)

Signalgrass, (broadleaf)

Barnyardgrass

Nutsedge, (vellow) [optional: suppression]

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

**SPRAY VOLUMES**: IMPORTANT - Use 50-220 gallons per acre (1.2-5.0 gallons per 1,000 sq.ft.) with spray pressures adjusted to between 20-40 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 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 -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.

The maximum application rate to turf is 0.9 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.

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.

TABLE 1. LEAF STAGES OF GRASSY WEEDS FOR OPTIMUM CONTROL WITH THIS PRODUCT.

Weed species	1 - 3 leaf	4 - 5 leaf (1 tiller)	6 leaf (2 tillers)	7 leaf (3 tillers)	8 leaf (4 tillers)
Crabgrass, (large and smooth)	Х	X	Х	Footnote 1	Footnote 1 (reduced control)
Foxtail, (green, yellow and giant)				1	
Signalgrass, (broadleaf)					777
Nutsedge, (yellow) <sup>[2]</sup>	Х	Footnote 1	Footnote 1	Footnote 1	Footnote 1 (reduced control)

<sup>&</sup>lt;sup>1</sup>Sequential application may be required at 14 to 21 days with a maximum of two broadcast applications per year.

[Optional: <sup>2</sup>Suppression 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.]

TABLE 2. USE RATES FOR GRASSY WEEDS AND YELLOW NUTSEDGE IN TURF

Turf Species EH-1427 Herbicide Can be Used On				
Warm-Season Turf:				
Kentucky Bluegrass, 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	Rates	Spray Volume*	Maximum number of broadcast applications	Application Interval, days
Single	7 - 8 pints/A or 2.6–3.0 fl. oz./1000 sq. ft.	50 - 220 gal/A or 1.2 - 5.0 gal/1000 sq.ft.	2	
Sequential	7 - 8 pints/A or 2.6–3.0 fl. oz./1000 sq. ft.	50 – 220 gal/A or 1.2 – 5.0 gal/1000 sq.ft.	2	14-21 days

<sup>\*</sup>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 2.6–3.0 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 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.

The maximum application rate to turf is 0.9 pound 2,4-D acid equivalent per acre per application per site. The maximum number of broadcast applications per treatment site is 2 per year.

Table 3. USE RATES FOR BROADLEAF WEEDS IN TURF

Cool-season Turf:	Warm-season Turf:
Kentucky bluegrass,	hybrid bermudagrass,
perennial ryegrass,	common bermudagrass
Fescues,	zoysiagrass,
Annual bluegrass (Poa annua)	buffaiograss
rough bluegrass (Poa trivialis)	
annual ryegrass	

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.

Single and Sequential Application.					
Application schedule	RATES	Spray volume	Maximum number of broadcast applications	Application Interval	
Single	7-8 pints/Acre or 2.6–3.0 fl. oz./1,000 sq. ft	20-220 gallons/acre or (0.5 -5.0 gals./1,000 sq. ft.)	2		
Sequential	7-8 pints/Acre or 2.6–3.0 fl. oz./1,000 sq. ft	20-220 gallons/acre or (0.5 -5.0 gals./1,000 sq. ft.	2	14-21 days	

#### 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 2.6–3.0 fl. oz. of this product per one (1.0) gallon of water for treatment of approximately 1,900 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 prairie Bedstraw Beggarweed, creeping Bindweed Black medic Broadleaf plantain Buckhorn plantain Bull thistle Burdock, common Buttercup, creeping Carpetweed Chickweed, common Chicory Cinquefoil Clovers Crabgrass <sup>1, 2</sup> (large and smooth) Curly dock Dandelion Dayflower Deadnettle Dock Dogfennel Dollarweed (*pennywort) English Daisy 1 False dandelion (*spotted catsear & common catsear) Field bindweed (*morningglory & creeping jenny) Field oxeye-daisy (*creeping oxeye)	Filaree, whitestem & redstem Florida betony Florida pusley Foxtail¹ (green, yellow and giant) Ground ivy Groundsel Geranium (Carolina) Hawkweed Healail Henbit Innocence (Blue-eyed Mary) Knotweed Lambsquarters Lawn burweed Lespedeza, common Mallow, common Matchweed Morningglory spp. Mouseear chickweed Nutsedge, yellow³ Old world diamond flower Oxalis (*yellow woodsorrel & creeping woodsorrel) Parsley-piert Pennsylvania smartweed Pepperweed Pigweed Pineappleweed Plantain Poison ivy Poison oak	Prickly lettuce (*compass plant) Puncturevine Purple cudweed Purslane Ragweed Redweed Red sorrel (*sheep sorrel) Shepherdspurse Signalgrass¹ (Broadleaf) Speedwell *Veronica (Common, Slender and Thymeleaf) Spurge Thistles Virginia buttonweed White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort) Wild carrot Wild garlic Wild geranium Wild lettuce Wild mustard Wild onion Wild strawberry Wild Violet¹ Yarrow Yellow rocket  and many more broadleaf weeds				

<sup>\*</sup>Synonyms

[Optional: <sup>3</sup>Suppression 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.]

<sup>&</sup>lt;sup>1</sup>Sequential application may be required at 14 to 21 days with a maximum of two broadcast applications per year.

<sup>&</sup>lt;sup>2</sup>Biotypes 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)].

#### STORAGE & 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.

<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.

#### LIMITED WARRANTY AND DISCLAIMER.

IMPORTANT: Read this WARRANTY STATEMENT before buying or using this product. By opening arid using this product, buyer and all users agree to accept the terms of this WARRANTY STATEMENT 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 of use or 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.

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 LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR 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 OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTIAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS 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 WARRANTY STATEMENT cannot be varied by any written or varial 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**

- I. 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-XXX-XXXX [contact www.xxx-xxxx.com]
  - ◆ ProForm<sup>™</sup> 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
- Craborass 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