



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

April 25, 2023

Eric D. Smith  
Director, Regulatory Affairs  
PBI/Gordon Corporation  
P.O. Box 860350  
Shawnee, Kansas 66286

Subject: Registration Review Label Mitigation for Sulfentrazone and MCPP  
Product Name: EH-1594 HERBICIDE  
EPA Registration Number: 2217-1018  
Application Dates: May 10, 2019 and January 8, 2021  
Decision Numbers: 591391, 591390

Dear Eric D. Smith:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Sulfentrazone and MCPP Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

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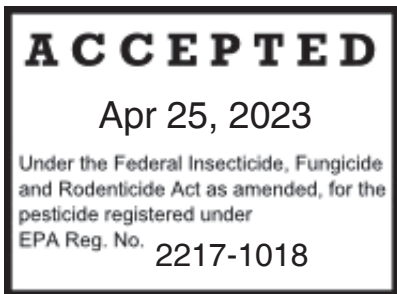
If you have any questions about this letter, please contact DeMariah Koger by phone at (202)-566-2288, or via email at [koger.demariah@epa.gov](mailto:koger.demariah@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Linda Arrington', with a stylized flourish at the end.

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure



2,4-D DICAMBA MCPP-P	GROUP	4	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

## EH-1594 HERBICIDE

### EPA Reg. No. 2217-1018

Not for sale, distribution or use in Nassau or Suffolk Counties in New York State.

**ACTIVE INGREDIENTS:**

2,4-D, 2-ethylhexyl ester .....	57.73%
MCPP-p acid .....	8.74%
Dicamba acid .....	3.61%
Sulfentrazone .....	1.63%
<b>OTHER INGREDIENTS .....</b>	<b>28.29%</b>
<b>TOTAL .....</b>	<b>100.00%</b>

**THIS PRODUCT CONTAINS:**

- 3.52 lb 2,4-dichlorophenoxyacetic acid equivalent per gallon or 38.44%
- 0.80 lb (+)-(R)-2-(2-methyl-4-chlorophenoxy) propionic acid equivalent per gallon or 8.74%
- 0.33 lb 3,6-dichloro-o-anisic acid equivalent per gallon or 3.61%
- 0.15 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 1.63%

Isomer Specific by AOAC Methods.  
Contains petroleum distillates.

# KEEP OUT OF REACH OF CHILDREN

## DANGER

**FIRST AID**

**If in eyes:** 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. **If swallowed:** Call a poison control center or doctor immediately for treatment advice. Do not give any liquids to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. **If on skin:** 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.

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

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

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

See attached booklet [inside pages] for complete Precautionary Statements and Directions for Use, including Storage and Disposal.

**Net Contents:** \_\_\_\_  
**EPA Est. No.** \_\_\_\_

**Company Name and Address:**  
PBI/Gordon Corporation  
P.O. Box 860350  
Shawnee, KS 66286



# **PRECAUTIONARY STATEMENTS**

## **Hazards to Humans and Domestic Animals**

**DANGER:** Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse

## **Personal Protective Equipment (PPE)**

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

- protective eyewear (goggles, face shield, or safety glasses),
- long-sleeved shirt and long pants,
- shoes and socks, plus
- chemical-resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber, or viton gloves (except for applicators using ground boom equipment), and
- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

\* Applicators may choose not to wear protective eyewear when dilution is with water only and dilution rates are greater (higher) than 10:1 or greater (higher) than 10 parts of water to 1 part of product.

## **User Safety Requirements**

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

### **User Safety Recommendations**

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **First Aid**

<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</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>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Do not give any liquids to the person.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If on skin:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.	
<b>NOTE TO PHYSICIAN:</b> Probable mucosal damage may contraindicate the use of gastric lavage. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	

## Environmental Hazards

This pesticide may be toxic to fish and aquatic invertebrates and may adversely affect non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to plants, and 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.

**Non-Target Organism Advisory:** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

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

### 1. Product Description

EH-1594 HERBICIDE contains four active ingredients that, in combination, provide fast visual activity, broaden the spectrum of weed control, and offer multiple modes of action for resistance management.

EH-1594 HERBICIDE offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass. This product exhibits improved cool-weather performance compared to standard "3-way amines."
- High selectivity (turfgrass safety) in established cool-season turfgrass and warm-season turfgrass.
- Rapid and effective weed control for common and troublesome [tough] weed species in turfgrass, including: dandelion, spurge, [and] white clover [and dollarweed (pennywort)].
- The speed of action and the early weed injury symptoms are features of this active ingredient combination compared to standard "3-way amines." Often, the weed injury symptoms can be noticed within hours of the application and plant death can occur within 10 to 14 days.
- This product is rainfast in as little as 3 hours.

### 2. Resistance Management

For resistance management, this product contains Group 4 and Group 14 herbicides. Any weed population may contain or develop plants naturally resistant to this product and other Group 4 or 14 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance management strategies should be followed.

To delay herbicide resistance take one or more of the following steps:

- Rotate the use of this product or other Group 4 or 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.

- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use, and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout area prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: 1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; 2) a spreading patch of non-controlled plants of a particular weed species; 3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or pest control advisor for additional pesticide resistance-management and/or integrated weed-management recommendations for specific types of turf and weed biotypes.
- For further information or to report suspected resistance, call 877-800-5556.

### 3. Spray Preparation And Tank Mixtures

**For All Tank Mixtures:** It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

#### Mixing With Water:

Add one-half the required amount of water to the spray tank, then add EH-1594 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.

Do not use tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer the spray solution to alter the pH range as appropriate.

#### Mixing With Liquid Fertilizers:

ALWAYS PREMIX EH-1406 Broadleaf Herbicide WITH 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.

#### Mixing With Adjuvants And Spray Additives:

Adjuvants (such as surfactants, spreaders, spreader-stickers, spray thickeners, foaming agents, activators, detergents, and drift reducing agents) combined with this product can damage the leaf tissue of turfgrass. If any discoloration or cosmetic effects are objectionable or would be unacceptable, then adjuvant(s) combined with EH-1594 HERBICIDE would not be recommended. Do not use adjuvants and spray additive tank-mix combinations, unless your experience indicates that the tank mixture will not result in turf injury.

#### **4. Ground Equipment**

**Spray distribution:** The accuracy and uniformity of the herbicide distribution is the sole responsibility of the applicator. 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.

**Spray volume:** Spray volumes of 10 to 220 gallons per acre 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 1000 square feet). Ground applicators must use a minimum finished spray volume of 10 gallons per acre.

- Calibration and proper application are essential when using this product.
- Over-application or rates above those specified on this label can cause turf injury.
- Hand-held technique: 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.

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.

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, grapes, garden/vegetable crops, and ornamentals (flowers, trees, and shrubs) avoid contact with the spray solution, spray droplets, and spray mist (fine droplets).

After using this product, clean sprayer with soap or detergent and water, or an approved spray tank cleaner and rinse thoroughly before applying other pesticides.

#### **5. Mandatory Spray Drift Management**

##### **Ground Boom Applications**

- User must only apply with the release height recommended by the manufacturer, but no more than 30 inches above the ground or crop canopy.
- Select nozzle and pressure that deliver a medium or coarser droplet size (ASABE\* S572).
- Do not apply when wind speeds exceed 10 miles per hour at the application site
- Do not apply during temperature inversions

\*ASABE – American Society for Agricultural and Biological Engineers.

#### **Spray Drift Advisories**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### **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.

2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

### **Importance of Droplet Size**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### **Controlling Droplet Size - Ground Boom**

**Volume:** Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

**Pressure:** Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.

**Spray Nozzle:** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **Boom Height - Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

**Shielded Sprayers:** Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

**Temperature and Humidity:** When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

**Temperature Inversions:** Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

### **Wind**

Applicators may spray only when wind speed is between 3 and 10 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

**Handheld Technology Applications:** Take precautions to minimize spray drift

### **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.

### **Equipment**

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

## **6. Where To Use**

This product provides selective broadleaf control in warm-season and cool-season turfgrass in 5 use sites.

- **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.
- **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.
- **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.
- **Non-cropland Sites:** Highway rights-of-way (principal, interstate, county, private, and unpaved roads). Roadsides, roadside ditches, road shoulders, road embankments, dividers, medians, parking areas, and paved areas. Municipal, state, and federal lands. Airports, airfields and military installations. Fuel storage areas. Fencerows. Industrial sites (including but not limited to lumber yards, tank farms, storage areas, vacant lots and production facilities). Utility and pipeline rights-of-way.

### **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 (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.

### **Turfgrass tolerance:**

- The turfgrass tolerance to this product may vary and temporary turfgrass yellowing may occur on certain varieties of hybrid Bermudagrass. Adverse environmental conditions may reduce the selectivity on the turfgrass. Do not apply this product to stressed turf.
- Certain spray tank additives (adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing emulsifiable concentrates may reduce the selectivity on the turfgrass. Do not use adjuvants and spray additive tank-mix combinations, unless your experience indicates that the tank mixture will not result in turf injury.

### **Use Restrictions:**

- Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production, or for research purposes.
- Do not apply this product to bentgrass greens or tees, St. Augustinegrass, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- 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.
- 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. Injury can occur if this product is applied under any of these or other stress conditions. 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.

- Do not use this product on or near desirable plants, including contact of spray on exposed root systems or adventitious shoots within the drip line of desirable trees and shrubs, since injury may result.
- Aerial application is prohibited.

**State restrictions:**

- **New York:** Only one application per year of this product is allowed. This product is not allowed to be sold, distributed or used in Nassau or Suffolk Counties.
- **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. Do not apply product to bare ground.

## **7. Application Schedules**

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 broadcast applications or follow-up applications as spot treatments at a 30 day interval are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions.

Spot treatments during the summer may be appropriate for sparse infestations, or as a follow-up treatment, or any time broadleaf weeds are actively growing.

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.

**For newly seeded areas:**

Delay application of this product to grass seedlings until after the second mowing.

**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.

**Reseeding interval:**

Treated areas may be reseeded 3 weeks after application.

**Irrigation:**

Do not apply this product through any type of irrigation system. Rainfast in as little as 3 hours. Do not apply this product immediately before rainfall or irrigation. If possible, do not irrigate or water the turfgrass within 3 to 6 hours after application. If dry conditions exist, a scheduled irrigation or watering 24 hours before and 24 hours after application is suggested.

**Mowing:**

Delay mowing 2 days before and until 2 days after the application of this product.

## 8. How Much To Use

**Use Rates and Spray Volumes:** Generally, the lower application rates within the specified range of Table 1 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.

### Broadcast Treatment:

<b>Table 1: Use rates for Turfgrass.</b>		
<b>Species</b>	<b>Rate</b>	<b>Spray Volume</b>
<b>Cool-season turf</b>		
Kentucky Bluegrass, Annual Bluegrass, Annual Ryegrass, Perennial Ryegrass, Tall Fescue, Red or Fine Leaf Fescues, Creeping Bentgrass, and Colonial Bentgrass (excluding golf greens and tees).  Mixtures of cool-season species in non-cropland areas established for roadside vegetation management or for low maintenance. (Kentucky Bluegrass, Tall Fescue, Smooth Bromegrass & Orchardgrass)	1.5 to 2.0 pt/acre  (0.55 to 0.73 fl.oz./1000 sq.ft.)	10 to 220 gal/acre  (0.23 to 5.0 gal/1000 sq.ft.)
<b>Warm-season turf</b>		
Hybrid Bermudagrass, Common Bermudagrass, Zoysiagrass	1.5 pt/acre  (0.55 fl.oz./1000 sq.ft.)	10 to 220 gal/acre  (0.23 to 5.0 gal/1000 sq.ft.)
Centipedegrass*, Bahiagrass, and Buffalograss	0.75 to 1.25 pt/acre  (0.28 to 0.46 fl.oz./1000 sq.ft.)	10 to 220 gal/acre  (0.23 to 5.0 gal/1000 sq.ft.)
* For Centipedegrass use lower rates within specified range until turfgrass tolerance to injury can be determined.		
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.		
<b>Dormant turf:</b> This product may be applied to fully dormant Bermudagrass, fully dormant Zoysiagrass, and fully dormant Bahiagrass.		
<b>New York:</b> Only one application per year of this product is allowed. This product is not allowed to be sold, distributed or used in Nassau or Suffolk Counties.		

### Limitations on broadcast applications to Turfgrass:

The maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. The maximum application rate is 2 pt of product per acre per application [0.88 lb 2,4-D ae, 0.20 lb mecoprop-p ai, 0.08 lb dicamba ai, and 0.04 lb sulfentrazone ai per acre per application]. The maximum annual rate is 4 pt of product per acre per year [1.76 lb 2,4-D ae, 0.40 lb mecoprop-p ai, 0.17 lb dicamba ai, and 0.08 lb sulfentrazone ai per acre per year].

### Spot Treatment with hand operated sprayers (including backpack sprayers, compression sprayers, and knapsack sprayers):

- Apply any time the emerged broadleaf weeds are actively growing.
- Calibration and proper application are essential when using this product.

- Uniform applications are essential when using this product. Over-application or rates above those specified on this label including excessive overlaps of this product can cause turf injury.
- Hand-held techniques: Wands fitted with flat fan nozzle tips may be used with the appropriate technique. Spray wands fitted with flat fan tips 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 motions result in uneven coverage.
- Follow-up applications as spot treatments at a 30 day interval are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions.
- **For cool-season turfgrass listed in Table 1:** Mix 0.55 to 0.73 fl.oz. of this product per 1 gallon of water for treatment of approximately 1000 sq.ft. of turfgrass. Apply any time the emerged broadleaf weeds are susceptible.
- **For warm-season turfgrass listed in Table 1:** Mix 0.28 to 0.46 fl.oz. of this product per 1 gallon of water for treatment of approximately 1000 sq.ft. of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. For centipedegrass use lower rates within specified range until turfgrass tolerance to injury can be determined.

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

Spot treatment is defined as a treatment area no greater than 1000 sq.ft. per acre. The maximum application rate is 0.73 fl.oz. of product per 1000 sq.ft. per application [0.88 lb 2,4-D ae, 0.20 lb mecoprop-p ai, 0.08 lb dicamba ai, and 0.04 lb sulfentrazone ai per acre per application]. The maximum number of spot treatments is limited to 2 per year with a minimum of 30 days between applications. The maximum annual application rate is 4 pt of product per acre per year [1.76 lb 2,4-D ae, 0.40 lb mecoprop-p ai, 0.17 lb dicamba ai, and 0.08 lb sulfentrazone ai per acre per year].

**9. Tough Weed Control In Industrial Or Low Maintenance Areas**

In addition to weeds listed in the Broadleaf Weeds Controlled section, EH-1594 HERBICIDE can be used for certain tough-to-control weeds as listed in Table 2. Mixed stands of Kentucky Bluegrass, Tall Fescue, Smooth Bromegrass, Orchardgrass and Reed Canarygrass may be treated. Applications to non-cropland areas (roadsides and rights-of-way) are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

Treatments of EH-1594 HERBICIDE may injure or kill legumes including clovers (sweet, yellow, red, crimson, alsike, hop, white), lespedezas, trefoils and vetches. Biennial and perennial weeds may require follow-up or sequential treatments.

<b>Weed Types</b>	<b>Troublesome weeds:</b>	<b>Amount of product, pints/acre<sup>1</sup></b>	<b>Spray Volume</b>	<b>When to Apply</b>
Annual Broadleaf	ivyleaf morningglory, redroot pigweed, cocklebur, sunflower, velvetleaf (butterprint)	1.25 to 1.6 pt/acre	10 to 220 gal/acre (0.23 to 5.0 gal per 1000 sq.ft.)	Spring or fall during active growth.
Biennial	Bull thistle, musk thistle, common burdock	1.6 to 2.2 pt/acre	10 to 220 gal/acre (0.23 to 5.0 gal per 1000 sq.ft.)	Spring or fall during seedling to rosette stage.
Perennial	Burclover, Canada thistle, field bindweeds, English daisy, hoary cress (whiteweed), Veronica (corn speedwell), wild violet.	1.6 to 2.2 pt/acre	10 to 220 gal/acre (0.23 to 5.0 gal per 1000 sq.ft.)	Spring or fall during bud to bloom stage.

**Footnote 1:** Use the lower rate within the range specified for highly favorable plant growing conditions and when broadleaf weeds are less than 6 inches in height. Use the higher rate within the range specified for tall vegetation, dense canopies, weeds beyond the suggested growth stage, or during adverse conditions.

**New York:** Only one application per year of this product is allowed. This product is not allowed to be sold, distributed or used in Nassau or Suffolk Counties.

**Limitations on applications to Non-Cropland sites:**

The maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. The maximum application rate is 2.2 pt of product per acre per application [0.97 lb 2,4-D ae, 0.22 lb mecoprop-p ai, 0.09 lb dicamba ai, and 0.04 lb sulfentrazone ai per acre per application]. The maximum annual rate is 4.4 pt of product per acre per year [1.94 lb 2,4-D ae, 0.44 lb mecoprop-p ai, 0.18 lb dicamba ai, and 0.08 lb sulfentrazone ai per acre per year].

**10. Broadleaf Weeds Controlled**

EH-1594 HERBICIDE will control or suppress the following broadleaf weeds. Apply any time the emerged broadleaf weeds are susceptible.

<b>BROADLEAF WEEDS</b>			
Aster, white heath & white prairie	Dollarweed (*pennywort)	Lambsquarters	Purple cudweed
Bedstraw	False dandelion (*spotted catsear & common catsear)	Lawn burweed	Purslane
Beggarweed, creeping	Field bindweed	Lespedeza, common	Ragweed
Bindweed	(*morningglory & creeping jenny)	Mallow, common	Redweed
Black medic	Field oxeye-daisy (*creeping oxeye)	Matchweed	Red sorrel (*sheep sorrel)
Broadleaf plantain	Filaree, whitestem & redstem	Mouseear chickweed	Shepherdspurse
Buckhorn plantain	Florida betony	Nutsedge** (yellow)	Spurge
Bull thistle	Florida pusley	Old world diamond flower	Thistle
Burdock, common	Ground ivy	Oxalis (*yellow woodsorrel & creeping woodsorrel)	Virginia buttonweed
Buttercup, creeping	Groundsel	Parsley-piert	White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
Carpetweed	Hawkweed	Pennsylvania smartweed	Wild carrot
Chickweed, common	Healall	Pepperweed	Wild geranium
Chicory	Henbit	Pigweed	Wild lettuce
Cinquefoil	Innocence (Blue-eyed Mary)	Pineappleweed	Wild mustard
Clover	Knotweed	Plantain	Wild onion
Curly dock		Poison ivy	Wild strawberry
Dandelion		Poison oak	Yarrow
Dayflower		Prickly lettuce (*compass plant)	Yellow rocket
Deadnettle		Puncturevine	
Dock			
Dogfennel			
* Synonyms			
** Suppression only when nutsedge is young and actively growing.			

**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. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

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

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

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

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

[OR

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

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

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

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

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

[OR

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

**[For Refillable Containers:]**

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

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

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



## **LIMITED WARRANTY AND DISCLAIMER**

**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.**

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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 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. Advertising claims that may be presented on container labeling, advertisements, brochures, and other marketing/sales promotional materials:**

- Rainfast [Rainproof] in [as little as] 3 hours
- [weed option] control in as little as one week
- Proven performance
- Consistently fast control on tough listed weeds like dandelion, spurge, clover, plantain, ground ivy and [various other listed weeds].
- From the makers of Trimec® herbicides.
- Trimec® is a registered trademark of PBI/Gordon Corporation.



- [www.pbigordon.com](http://www.pbigordon.com)

## **DOCUMENT CONTROL INFORMATION**

1. **Unique Label Identifier:** 002217-01018.20230414.amend-proposed-clean.doc

2. **Reason for Issue:** MCPP-p Reg Review + EPA Comments, Registration Review - Sulfentrazone

<b>Internal Usage Notes</b>
Associated Container Label: