



# NOTICE OF WEED CONTROL APPLICATION

**Date of Application:** June 1, 2023

**Location:** Fox Hill Park (southeast side)

**Reason for Application:** Spot treat the turf for broadleaf weed control

**Product Manufacturer Name:** Power Zone Broadleaf Herbicide for Turf

-EPA registration no. 2217-834

-Active ingredients: MCPA, 2-ethylhexyl/ester, Mecoprop-p acid, Dicamba acid, and Carfentrazone-ethyl.

-Precautionary statement: Causes moderate eye irritation. Harmful if absorbed through skin. Harmful if swallowed.

**\*No applications within 25 feet of playgrounds**

**\*See attached label and SDS sheet**

**\*Dates are subject to change due to weather**

CLICK HERE TO JUMP TO USE DIRECTIONS



# POWER ZONE<sup>®</sup>

BROADLEAF HERBICIDE FOR TURF

## ACTIVE INGREDIENTS:

Carfentrazone-ethyl	0.48%
MCPA, 2-ethylhexyl ester	41.98%
Mecoprop-p acid	5.39%
Dicamba acid	2.69%

**INERT INGREDIENTS:** 49.46%  
**TOTAL** 100.00%

## THIS PRODUCT CONTAINS:

0.04 lb. Ethyl  $\alpha$ ,2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate per gallon or 0.48%.

2.21 lbs. 2-methyl-4-chlorophenoxyacetic acid equivalent per gallon or 26.92%.

0.44 lb. (+) R-2-(2-methyl-4-chlorophenoxy)propionic acid equivalent per gallon or 5.39%.

0.22 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 2.69%.

Contains petroleum distillates.

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 below for First Aid and additional Precautionary Statement.



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

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**CAUTION:** Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT:

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category E on a EPA chemical resistance category selection chart.

### NON-WPS USES:

Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural-plant uses are covered by the WPS – must wear the following:

- When mixing, loading or applying this product, wear long-sleeved shirt, long pants, socks, shoes, and chemical-resistant gloves.

### Personal Hygiene Statement For Non-WPS Uses:

Wash thoroughly with soap and water after handling.

### WPS USES:

Applicators and other handlers who handle this pesticide for any uses covered by the Worker Protection Standard (40 CFR Part 170) – in general agricultural-plant uses are covered – must wear the following:

- long-sleeved shirt and long pants.
- chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton gloves.
- shoes plus socks.

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 For WPS Uses:

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.
- 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

<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 induce vomiting unless told to by a poison control center or doctor.</li><li>• Do not give any liquid to the person.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li><li>• Call a poison control center or doctor for treatment advice.</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>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
<b>NOTE TO PHYSICIAN:</b> Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

## ENVIRONMENTAL HAZARDS:

Carfentrazone-ethyl is very toxic to algae and moderately toxic to fish. 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.

When cleaning equipment, do not pour the washwater on the ground; spray or drain over a large area away from wells and other water sources.

Most cases of groundwater contamination involving phenoxy herbicides such as MCPA and MCPP-p have been associated with mixing, loading and disposal sites. Caution should be exercised when handling MCPA and MCPP-p pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

## 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:

- coveralls over long-sleeved shirt and long pants.
- chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton gloves.
- shoes plus socks.

## 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 reenter or permit workers to reenter treated areas until sprays have dried.

### PRODUCT DESCRIPTION:

Power Zone® Broadleaf Herbicide For Turf contains four active ingredients including carfentrazone-ethyl that broaden the spectrum of weed control. Carfentrazone-ethyl is in the aryl triazolinone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production.

Power Zone offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass.
- Superior cool weather performance.
- High selectivity (turfgrass safety) in established cool-season turfgrass and warm-season turfgrass.
- Good toxicological, environmental, and ecological properties compared to the standards.
- Carfentrazone-ethyl combinations provide rapid and effective weed control for common and troublesome weed species in turfgrass, e.g. spurge, pennywort (dollarweed), dandelion, and white clover.
- Fast-acting with evidence of injury within hours. The speed of action (rate of phytotoxicity) and the early injury symptoms are unique features of carfentrazone-ethyl combinations. Generally, the injury symptoms can be noticed within hours of the application and plant death can occur within 7-14 days.

### SPRAY PREPARATION AND TANK MIXTURES:

Power Zone is an emulsifiable concentrate intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water as a diluent.

#### Water as diluent:

Add one-half the required amount of water to the spray tank, then add Power Zone slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. 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.

#### Liquid fertilizers as diluents:

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (eg. UAN or urea solutions). Always perform a jar compatibility test before large scale mixing.

### GROUND EQUIPMENT:

Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications. Do not use flood nozzles, Raindrop®, or nozzle tips larger than 8008. Spray droplets larger than 400 microns may reduce coverage and subsequent loss in weed control.

Spray volumes of 3-175 gallons per acre with spray pressures adjusted to 20-40 psi are appropriate. Use higher spray volumes for dense weed populations.

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/nontarget 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.

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.

### WHERE TO USE:

Power Zone provides selective broadleaf control in warm-season and cool-season turfgrass in five (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, and areas adjacent to athletic fields.
- **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.

- **Agricultural site:** Commercial sod production

- **Non-cropland Sites:** 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.

### 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.

### Turfgrass tolerance:

- The turfgrass tolerance to Power Zone may vary and temporary turfgrass yellowing may occur on certain varieties (F1) hybrids of hybrid bermudagrass. Environmental conditions and certain spray tank additives (eg. adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing other emulsifiable concentrates may reduce the selectivity on the turfgrass.

These cool-season and warm-season turfgrass species may be treated:

#### Cool-Season Turf

Kentucky bluegrass, annual bluegrass, annual ryegrass, perennial ryegrass, tall fescue, red or fine leaf fescues and mixtures of cool-season species in non-cropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth bromegrass, and orchardgrass).

#### Warm-Season Turf

Common bermudagrass, hybrid bermudagrass and zoysiagrass.

### Prohibitions:

- Do not apply this product to bentgrass greens, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.

### APPLICATION SCHEDULES:

Early postemergent applications of Power Zone are recommended for annual, biennial, and perennial weeds. Apply Power Zone to broadleaf weeds that are young and actively growing for the best results. Power Zone combines a contact herbicide with systemic herbicides and provides little or no residual activity at recommended use rates.

Power Zone may be applied as a single broadcast application or as a split/sequential broadcast applications in the spring, summer, or fall. 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.

Sequential broadcast applications or follow-up applications as spot treatments at a 2-6 week 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 susceptible. Apply on a spray-to-wet basis for the best results.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of Power Zone. 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 Power Zone.

### For newly seeded areas:

The application of Power Zone to grass seedlings is recommended after the second mowing.

### For newly sodded, sprigged, or plugged areas:

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

### For dormant turf:

Applications to dormant bermudagrass and dormant zoysiagrass are suggested.

### Prohibitions for application schedules:

- Do not broadcast apply when air temperatures exceed 90°F; some injury may be expected with spot treatments when air temperatures exceed 90°F.

### HOW MUCH TO USE: USE RATES AND SPRAY VOLUMES FOR TURFGRASS:

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 beyond the appropriate growth stages.

The maximum seasonal rate of carfentrazone-ethyl contained in this product with two (2) broadcast applications to turfgrass is 0.06 pounds of carfentrazone-ethyl per acre per season. The retreatment interval for sequential broadcast applications of this product on turfgrass is two (2) to six (6) weeks depending upon the growth stages of the target weeds.

Use rates and spray volumes of Power Zone as broadcast treatments for use on turfgrass are presented in Table 1.

**TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.**

Species	Amount of Product for SENSITIVE WEEDS, or Pints/Acre (fl. oz./ 1,000 sq. ft.)	Amount of Product for HARD-TO-CONTROL WEEDS, or Pints/Acre (fl. oz./ 1,000 sq. ft.)	Spray Volume	
			Gallons/ Acre	Gallons per 1,000 sq. ft.
COOL-SEASON TURF				
Kentucky bluegrass, Annual bluegrass, Annual ryegrass, Perennial ryegrass, Tall fescue and Red or Fine fescue.				
Mixtures of cool-season species in non-cropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth bromegrass and orchardgrass).	3.5-4.0 Pints/Acre or (1.3 to 1.5 fl. oz. per 1,000 sq. ft.)	4.0-5.0 Pints/Acre or (1.5 to 1.8 fl. oz. per 1,000 sq. ft.)	3-175	0.1-4.0
WARM-SEASON TURF				
Common Bermudagrass Hybrid Bermudagrass Zoysiagrass	2.0-3.0 Pints/Acre or (0.75 to 1.1 fl. oz. per 1,000 sq. ft.)	3.0-4.0 Pints/Acre or (1.1 to 1.5 fl. oz. per 1,000 sq. ft.)	3-175	0.1-4.0

**SPOT TREATMENTS WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS, COMPRESSION SPRAYERS, AND KNAPSACK SPRAYERS):**

- For cool-season turfgrass, mix 1.5-2.2 fl. oz. of Power Zone per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.
- For warm-season turfgrass, mix 0.75-1.5 fl. oz. of Power Zone per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.

Power Zone may be tank mixed with other herbicides EPA-registered for use on turfgrass to broaden the weed control spectrum compared to the products alone. These tank mixtures must be used according to the most restrictive label limitations and precautions. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered.

**CULTURAL TIPS FOR IMPROVED CONTROL:**

**Irrigation:**

- Do not apply this product through any type of irrigation system.
- Do not apply this product immediately before rainfall or irrigation. Do not irrigate or water the turfgrass within 24 hours after application

**Mowing:**

- Delay mowing 1 to 2 days before and after the application of this product.

**Reseeding interval:**

- Treated areas may be reseeded 2 weeks after application.

**BROADLEAF WEEDS CONTROLLED:**

Power Zone will control or suppress the following broadleaf weeds and will control or suppress other broadleaf weeds that are susceptible to MCPA.

**BROADLEAF WEEDS**

Annual fleabane	Cinquefoil	Field madder
Aster, white heath & white prairie	Clover	Field oxeye-daisy (*creeping oxeye)
Bedstraw	Cocklebur	Field pennycress
Beggarticks	Common mullein	Filaree, whitestem & redstem
Beggarweed, creeping	Compassplant	Florida pusley
Bindweed	Curly dock	Ground ivy
Birdsfoot trefoil	Dandelion	Groundsel
Black medic	Dayflower	Hairy bittercress
Broadleaf plantain	Deadnettle	Hawkweed
Buckhorn plantain	Dock	Healall
Bull thistle	Dogfennel	Henbit
Burclover	Dovefoot geranium	Horsenettle
Burdock, common	English daisy	Horseweed
Buttercup, creeping	False dandelion	Innocence
Carolina geranium	(*spotted catsear & common catsear)	(Blue-eyed Mary)
Carpetweed	Field bindweed	Jimsonweed
Chickweed, common	(*morningglory & creeping jenny)	Kochia
Chicory		

Lambsquarters	Poison ivy	(*corn speedwell)
Lawn burweed	Poison oak	Virginia buttonweed
Lespedeza, common	Prostrate knotweed	Virginia creeper
Mallow, common	(*knotweed)	Western salsify
Matchweed	Puncturevine	White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
Mouseear chickweed	Purple cudweed	Wild carrot
Mustard	Purslane	Wild garlic
Nettle	Ragweed	Wild geranium
Old world diamond flower	Redweed	Wild lettuce
<i>Oxalis</i> (*yellow woodsorrel & creeping woodsorrel)	Red sorrel (*sheep sorrel)	Wild mustard
Parsley-piert	Roundleaf greenbriar	Wild onion
Pennsylvania smartweed	Shepherdspurse	Wild strawberry
Pennywort (*dollarweed)	Spotted spurge	Wild violet
Pepperweed	Spurge	Yarrow
Pigweed	Star-of-Bethlehem	Yellow rocket
Pineappleweed	Sunflower	
Plantain	Thistle	
	Velvetleaf (*buttonweed)	
	Venice mallow	
	<i>Veronica</i>	*Synonyms

**STORAGE & DISPOSAL**

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

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

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

**CONTAINER DISPOSAL:** For Metal Containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

For Plastic Containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

**THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED.** This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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EPA REG. NO. 2217-834

Manufactured By  
**pbi/gordon**  
corporation  
An Employee-Owned Company  
1217 West 12th Street  
Kansas City, Missouri 64101  
[www.pbigordon.com](http://www.pbigordon.com)

Issue Date 07-Nov-2014

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Version 4

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product Name** PowerZone® Broadleaf Herbicide for Turf

### Other means of identification

**Product Code** PBI FP 6531076

**EPA Pesticide Registration Number** 2217-834

**Product Size** 4/1 U. S. Gal.

### Recommended use of the chemical and restrictions on use

**Recommended Use** Herbicide.

**Uses advised against** No information available.

### Details of the supplier of the safety data sheet

#### **Supplier**

PBI Gordon Corporation  
P.O. Box 860350  
Shawnee, KS 66286

#### **Manufacturer**

PBI Gordon Corporation  
P.O. Box 860350  
Shawnee, KS 66286

#### **Company Name**

PBI Gordon Corporation  
P.O. Box 860350  
Shawnee, KS 66286

#### **Emergency telephone number**

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Gases	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation Category	Category 2
Serious eye damage/eye irritation	Category 2B
Skin Sensitization	Category 1
Aspiration Toxicity	Category 1
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1
Flammable liquids	Category 4

### Label elements

### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes skin irritation. Causes eye irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.  
Combustible liquid.





Appearance Liquid

Physical state Liquid

Odor Esters

#### Precautionary Statements - Prevention

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Avoid release to the environment
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking

#### Precautionary Statements - Response

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN: Wash with plenty of soap and water
- Call a POISON CENTER or doctor/physician if you feel unwell
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Do NOT induce vomiting
- In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction
- Collect spillage

#### Precautionary Statements - Storage

- Store locked up
- Store in a well-ventilated place. Keep cool

#### Precautionary Statements - Disposal

- Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

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

#### Other information

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight-%
MCPA EH Ester	29450-45-1	41.98
Trade Secret	Proprietary	10-20*
Trade Secret	Proprietary	0-10*
R(+)-2(2 Methyl-4-chlorophenoxy)propionic acid (MCP)	16484-77-8	5.39
3,6-Dichloro-o-anisic acid (Dicamba)	1918-00-9	2.69
Carfentrazone-ethyl	128639-02-1	0.48

\* The exact percentage (concentration) of composition has been withheld as a trade secret

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapors or decomposition products. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

##### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	No information available.
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##### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Contains petroleum distillate - vomiting may cause aspiration pneumonia.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Foam. Carbon dioxide (CO2). Dry chemical.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
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##### Environmental precautions

<b>Environmental precautions</b>	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.
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##### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Dam up. Soak up with inert absorbent material. Cover liquid spill with sand, earth or other non-combustible absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on safe handling</b>	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers. Keep from freezing.
<b>Incompatible materials</b>	None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

<b>Exposure Guidelines</b>	
<b>Other Information</b>	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

<b>Engineering Controls</b>	Ensure adequate ventilation, especially in confined areas.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Tight sealing safety goggles. Face protection shield.
<b>Skin and body protection</b>	Wear protective gloves and protective clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Esters
<b>Appearance</b>	Liquid	<b>Odor threshold</b>	No information available
<b>Color</b>	Amber		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	Not Applicable		
Melting point/freezing point	<35 °F		
Boiling point / boiling range	> 93 °C / 200 °F		
Flash point	> 93 °C / > 200 °F	Pensky-Martens Closed Cup (PMCC)	



Evaporation rate	< 1
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	>1
Specific Gravity	0.9813
Water solubility	Emulsifiable
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Oxidizing properties	No information available

#### Other Information

Density	8.18 pounds/gallon
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### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### Chemical stability

Stable.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Hazardous polymerization

Will not occur.

#### Conditions to avoid

Keep out of reach of children.

#### Incompatible materials

None known.

#### Hazardous decomposition products

May emit toxic fumes under fire conditions. Hydrogen chloride. Nitrogen oxides (NOx). Carbon monoxide.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

#### Product Information

Inhalation	Irritant, moderate respiratory.
Eye contact	Moderately irritating to the eyes.
Skin Contact	Moderate skin irritation.
Ingestion	Ingestion of large amounts can cause abdominal discomfort, nausea, and vomiting.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
MCPA EH Ester 29450-45-1	= 1300 mg/kg ( Rat )	-	-
Trade Secret	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h
Trade Secret	= 1870 µL/kg ( Rat )	= 1110 µL/kg ( Rabbit )	-

R(+)-2(2-Methyl-4-chlorophenoxy)propionic acid (MCP) 16484-77-8	= 1050 mg/kg ( Rat )	> 4 g/kg ( Rat )	-
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	= 1039 mg/kg ( Rat )	= 1716 mg/kg ( Rabbit ) > 1 g/kg ( Rat ) > 2 g/kg ( Rabbit )	-
Carfentrazone-ethyl 128639-02-1	= 5143 mg/kg ( Rat )	> 4000 mg/kg ( Rat )	= 5.09 mg/L ( Rat ) 4 h

#### Information on toxicological effects

**Symptoms** No information available.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** May cause sensitization by skin contact.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The International Agency for Research on Cancer (IARC) lists chlorophenoxy herbicides in its Group 2B (limited evidence for Carcinogenicity in humans.) The US EPA has given the chlorophenoxy Herbicides 2,4-D, 2,4-DP, MCP, and MCPA a Class D classification (not classifiable as to human carcinogenicity.) More current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic effects and a recent World Health Organization (WHO) review of 2,4-D toxicology has concluded that 2,4-D is not a carcinogen. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
MCPA EH Ester 29450-45-1		Group 2B		
R(+)-2(2-Methyl-4-chlorophenoxy)propionic acid (MCP) 16484-77-8		Group 2B		X

**IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Chronic toxicity** Avoid repeated exposure. Repeated contact may cause allergic reactions in very susceptible persons.  
**Aspiration hazard** No information available.

#### Numerical measures of toxicity - Product Information

**Unknown Toxicity** 1 % of the mixture consists of ingredient(s) of unknown toxicity  
**LD50 Oral VALUE (mg/kg)** > 2000 mg/kg Rat-male Rat-female  
**LD50 Dermal VALUE** > 2000 mg/kg Rat-female Rat-male  
**LC50 Inhalation (DUST) VALUE** > 2.06 mg/L Rat-male Rat-female

The following values are calculated based on chapter 3.1 of the GHS document  
**ATEmix (inhalation-gas)** 2732 mg/L

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Very toxic to aquatic life with long lasting effects

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
MCPA EH Ester 29450-45-1	0.46: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.43: 96 h Pseudokirchneriella subcapitata mg/L EC50	3.2 - 4.6: 96 h Lepomis macrochirus mg/L LC50 flow-through 3.2: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.55: 96 h Lepomis macrochirus mg/L LC50 static		0.29: 48 h Daphnia magna mg/L EC50
Trade Secret		2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through		4720: 96 h Den-dronereides heteropoda mg/L LC50
Trade Secret		1.8: 96 h Oncorhynchus mykiss mg/L LC50		

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container, unless specified by the manufacturer.

### 14. TRANSPORT INFORMATION

**DOT**

Not regulated

**TDG**

Not regulated

**MEX**

Not regulated

**ICAO (air)**

UN/ID no.

UN3082

Proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class

9

Packing group

III

Special Provisions

A97, A158, A197

Description

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA EH Ester, Carfentrazone-ethyl), 9, III

**IATA**

Limited quantity applies with an inner packaging less than 5 L or gross package weight less than 30 kg.

UN number

UN3082

UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es)

9

Packing group

III

Special Provisions

A97, A158, A197

<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA EH Ester, Carfentrazone-ethyl), 9, III
<b>IMDG</b>	Limited quantity applies with an inner packaging less than 5 L or gross package weight less than 30 kg.
<b>UN number</b>	UN3082
<b>UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	III
<b>EmS-No.</b>	F-A, S-F
<b>Special Provisions</b>	274, 335, 969
<b>Description</b>	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MCPA EH Ester, Carfentrazone-ethyl), 9, III, Marine Pollutant

## 15. REGULATORY INFORMATION

### U.S. EPA Label Information

**EPA Pesticide Registration Number** 2217-834

#### **Federal Insecticide, Fungicide, Rodenticide Act Regulations**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

#### **EPA Pesticide Label**

Caution

Keep out of the reach of children

#### **PRECAUTIONARY STATEMENTS**

Hazards to Humans and Domestic Animals

**CAUTION:** Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Environmental Hazards

This pesticide 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. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. 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.

### International Inventories

<b>TSCA</b>	Not Listed
<b>DSL/NDSL</b>	Not Listed
<b>EINECS/ELINCS</b>	Not Listed
<b>ENCS</b>	Not Listed
<b>IECSC</b>	Not Listed
<b>KECL</b>	Not Listed
<b>PICCS</b>	Not Listed
<b>AICS</b>	Not Listed

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
MCPA EH Ester				X			X			X

Trade Secret	X	X		X			X	X	X	X
Trade Secret	X	X					X	X	X	X
R(+)-2(2-Methyl-4-chlorophenoxy)propionic acid (MCP)				X						
3,6-Dichloro-o-anisic acid (Dicamba)				X		X		X	X	X
Carfentrazone-ethyl							X			

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
3,6-Dichloro-o-anisic acid (Dicamba) - 1918-00-9	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	1000 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations****U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
3,6-Dichloro-o-anisic acid (Dicamba) 1918-00-9	X	X	X

**International Regulations****Mexico - Grade**

Moderate risk, Grade 2

**16. OTHER INFORMATION**

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<u>NFPA</u>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection X

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of PBI Gordon Corporation's knowledge, information and belief at the date of this publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process, unless specified in the text. PBI GORDON CORPORATION MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. Given the variety of factors that can affect the use and application of this product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. Each user is also responsible for evaluating the conditions of use and designing the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. PBI Gordon Corporation assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.

**End of Safety Data Sheet**



CLICK HERE TO JUMP TO USE DIRECTIONS



# POWER ZONE<sup>®</sup>

BROADLEAF HERBICIDE FOR TURF

## ACTIVE INGREDIENTS:

Carfentrazone-ethyl	0.48%
MCPA, 2-ethylhexyl ester	41.98%
Mecoprop-p acid	5.39%
Dicamba acid	2.69%

**INERT INGREDIENTS:** 49.46%  
**TOTAL** 100.00%

## THIS PRODUCT CONTAINS:

0.04 lb. Ethyl  $\alpha$ ,2-dichloro-5-[4(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate per gallon or 0.48%.  
2.21 lbs. 2-methyl-4-chlorophenoxyacetic acid equivalent per gallon or 26.92%.  
0.44 lb. (+)-R-2-(2-methyl-4-chlorophenoxy)propionic acid equivalent per gallon or 5.39%.  
0.22 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 2.69%.

Contains petroleum distillates.

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 below for First Aid and additional Precautionary Statement.



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

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**CAUTION:** Causes moderate eye irritation. Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT:

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category E on a EPA chemical resistance category selection chart.

### NON-WPS USES:

Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) – in general, only agricultural-plant uses are covered by the WPS – must wear the following:

- When mixing, loading or applying this product, wear long-sleeved shirt, long pants, socks, shoes, and chemical-resistant gloves.

### Personal Hygiene Statement For Non-WPS Uses:

Wash thoroughly with soap and water after handling.

### WPS USES:

Applicators and other handlers who handle this pesticide for any uses covered by the Worker Protection Standard (40 CFR Part 170) – in general agricultural-plant uses are covered – must wear the following:

- long-sleeved shirt and long pants.
- chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton gloves.
- shoes plus socks.

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 For WPS Uses:

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.
- 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

<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 induce vomiting unless told to by a poison control center or doctor.</li><li>• Do not give any liquid to the person.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.</li><li>• Call a poison control center or doctor for treatment advice.</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>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**NOTE TO PHYSICIAN:** Contains petroleum distillate – vomiting may cause aspiration pneumonia.

## ENVIRONMENTAL HAZARDS:

Carfentrazone-ethyl is very toxic to algae and moderately toxic to fish. 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.

When cleaning equipment, do not pour the washwater on the ground; spray or drain over a large area away from wells and other water sources.

Most cases of groundwater contamination involving phenoxy herbicides such as MCPA and MCPP-p have been associated with mixing, loading and disposal sites. Caution should be exercised when handling MCPA and MCPP-p pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

## 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:

- coveralls over long-sleeved shirt and long pants.
- chemical resistant gloves such as barrier laminate, nitrile rubber, neoprene rubber or Viton gloves.
- shoes plus socks.

## 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 reenter or permit workers to reenter treated areas until sprays have dried.

### PRODUCT DESCRIPTION:

Power Zone® Broadleaf Herbicide For Turf contains four active ingredients including carfentrazone-ethyl that broaden the spectrum of weed control. Carfentrazone-ethyl is in the aryl triazolinone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production.

Power Zone offers these advantages:

- Excellent postemergent activity with proven performance for broadleaf weed control in turfgrass.
- Superior cool weather performance.
- High selectivity (turfgrass safety) in established cool-season turfgrass and warm-season turfgrass.
- Good toxicological, environmental, and ecological properties compared to the standards.
- Carfentrazone-ethyl combinations provide rapid and effective weed control for common and troublesome weed species in turfgrass, e.g. spurge, pennywort (dollarweed), dandelion, and white clover.
- Fast-acting with evidence of injury within hours. The speed of action (rate of phytotoxicity) and the early injury symptoms are unique features of carfentrazone-ethyl combinations. Generally, the injury symptoms can be noticed within hours of the application and plant death can occur within 7-14 days.

### SPRAY PREPARATION AND TANK MIXTURES:

Power Zone is an emulsifiable concentrate intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water as a diluent.

#### Water as diluent:

Add one-half the required amount of water to the spray tank, then add Power Zone slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. 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.

#### Liquid fertilizers as diluents:

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (eg. UAN or urea solutions). Always perform a jar compatibility test before large scale mixing.

### GROUND EQUIPMENT:

Power sprayers fitted with a boom or spray wand/gun may be used for broadcast applications and spot treatments. For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage. Boom sprayers equipped with appropriate flat fan nozzles, tips, and screens are suitable for broadcast applications. Do not use flood nozzles, Raindrop®, or nozzle tips larger than 8008. Spray droplets larger than 400 microns may reduce coverage and subsequent loss in weed control.

Spray volumes of 3-175 gallons per acre with spray pressures adjusted to 20-40 psi are appropriate. Use higher spray volumes for dense weed populations.

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/nontarget 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.

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.

### WHERE TO USE:

Power Zone provides selective broadleaf control in warm-season and cool-season turfgrass in five (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, and areas adjacent to athletic fields.
- **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.

• **Agricultural site:** Commercial sod production

• **Non-cropland Sites:** 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.

### 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.

### Turfgrass tolerance:

- The turfgrass tolerance to Power Zone may vary and temporary turfgrass yellowing may occur on certain varieties (F1) hybrids of hybrid bermudagrass. Environmental conditions and certain spray tank additives (eg. adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing other emulsifiable concentrates may reduce the selectivity on the turfgrass.

These cool-season and warm-season turfgrass species may be treated:

#### Cool-Season Turf

Kentucky bluegrass, annual bluegrass, annual ryegrass, perennial ryegrass, tall fescue, red or fine leaf fescues and mixtures of cool-season species in non-cropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth brome grass, and orchardgrass).

#### Warm-Season Turf

Common bermudagrass, hybrid bermudagrass and zoysiagrass.

### Prohibitions:

- Do not apply this product to bentgrass greens, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.

### APPLICATION SCHEDULES:

Early postemergent applications of Power Zone are recommended for annual, biennial, and perennial weeds. Apply Power Zone to broadleaf weeds that are young and actively growing for the best results. Power Zone combines a contact herbicide with systemic herbicides and provides little or no residual activity at recommended use rates.

Power Zone may be applied as a single broadcast application or as a split/sequential broadcast applications in the spring, summer, or fall. 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.

Sequential broadcast applications or follow-up applications as spot treatments at a 2-6 week 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 susceptible. Apply on a spray-to-wet basis for the best results.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of Power Zone. 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 Power Zone.

#### For newly seeded areas:

The application of Power Zone to grass seedlings is recommended after the second mowing.

#### For newly sodded, sprigged, or plugged areas:

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

#### For dormant turf:

Applications to dormant bermudagrass and dormant zoysiagrass are suggested.

### Prohibitions for application schedules:

- Do not broadcast apply when air temperatures exceed 90°F; some injury may be expected with spot treatments when air temperatures exceed 90°F.

### HOW MUCH TO USE: USE RATES AND

#### SPRAY VOLUMES FOR TURFGRASS:

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 beyond the appropriate growth stages.

The maximum seasonal rate of carfentrazone-ethyl contained in this product with two (2) broadcast applications to turfgrass is 0.06 pounds of carfentrazone-ethyl per acre per season. The retreatment interval for sequential broadcast applications of this product on turfgrass is two (2) to six (6) weeks depending upon the growth stages of the target weeds.

Use rates and spray volumes of Power Zone as broadcast treatments for use on turfgrass are presented in Table 1.

**TABLE 1. RATE RECOMMENDATIONS FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS.**

Species	Amount of Product for SENSITIVE WEEDS, or Pints/Acre (fl. oz./ 1,000 sq. ft.)	Amount of Product for HARD-TO-CONTROL WEEDS, or Pints/Acre (fl. oz./ 1,000 sq. ft.)	Spray Volume	
			Gallons/ Acre	Gallons per 1,000 sq. ft.
COOL-SEASON TURF				
Kentucky bluegrass, Annual bluegrass, Annual ryegrass, Perennial ryegrass, Tall fescue and Red or Fine fescue.  Mixtures of cool-season species in non-cropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth brome grass and orchardgrass).	3.5-4.0 Pints/Acre or (1.3 to 1.5 fl. oz. per 1,000 sq. ft.)	4.0-5.0 Pints/Acre or (1.5 to 1.8 fl. oz. per 1,000 sq. ft.)	3-175	0.1-4.0
WARM-SEASON TURF				
Common Bermudagrass Hybrid Bermudagrass Zoysiagrass	2.0-3.0 Pints/Acre or (0.75 to 1.1 fl. oz. per 1,000 sq. ft.)	3.0-4.0 Pints/Acre or (1.1 to 1.5 fl. oz. per 1,000 sq. ft.)	3-175	0.1-4.0

**SPOT TREATMENTS WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS, COMPRESSION SPRAYERS, AND KNAPSACK SPRAYERS):**

- For cool-season turfgrass, mix 1.5-2.2 fl. oz. of Power Zone per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.
- For warm-season turfgrass, mix 0.75-1.5 fl. oz. of Power Zone per one (1.0) gallon of water for treatment of approximately 1,000 sq. ft of turfgrass. Apply any time the emerged broadleaf weeds are susceptible. Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.

Power Zone may be tank mixed with other herbicides EPA-registered for use on turfgrass to broaden the weed control spectrum compared to the products alone. These tank mixtures must be used according to the most restrictive label limitations and precautions. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered.

**CULTURAL TIPS FOR IMPROVED CONTROL:**

**Irrigation:**

- Do not apply this product through any type of irrigation system.
- Do not apply this product immediately before rainfall or irrigation. Do not irrigate or water the turfgrass within 24 hours after application

**Mowing:**

- Delay mowing 1 to 2 days before and after the application of this product.

**Reseeding Interval:**

- Treated areas may be reseeded 2 weeks after application.

**BROADLEAF WEEDS CONTROLLED:**

Power Zone will control or suppress the following broadleaf weeds and will control or suppress other broadleaf weeds that are susceptible to MCPA.

**BROADLEAF WEEDS**

Annual fleabane	Cinquefoil	Field madder
Aster, white heath & white prairie	Clover	Field oxeye-daisy (*creeping oxeye)
Bedstraw	Cocklebur	Field pennycress
Beggarticks	Common mullein	Filaree, whitestem & redstem
Beggarweed, creeping	Compassplant	Florida pusley
Bindweed	Curly dock	Ground ivy
Birdsfoot trefoil	Dandelion	Groundsel
Black medic	Dayflower	Hairy bittercress
Broadleaf plantain	Deadnettle	Hawkweed
Buckhorn plantain	Dock	Healall
Bull thistle	Dogfennel	Henbit
Burclover	Dovefoot geranium	Horsenettle
Burdock, common	English daisy	Horseweed
Buttercup, creeping	False dandelion	Innocence
Carolina geranium	(*spotted catsear & common catsear)	(Blue-eyed Mary)
Carpetweed	Field bindweed	Jimsonweed
Chickweed, common	(*morningglory & creeping jenny)	Kochia
Chicory		

Lambsquarters	Poison ivy	(*corn speedwell)
Lawn burweed	Poison oak	Virginia buttonweed
Lespedeza, common	Prostrate knotweed	Virginia creeper
Mallow, common	(*knotweed)	Western salsify
Matchweed	Puncturevine	White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort)
Mouseear chickweed	Purple cudweed	Wild carrot
Mustard	Purslane	Wild garlic
Nettle	Ragweed	Wild geranium
Old world diamond flower	Redweed	Wild lettuce
Oxalis	Red sorrel	Wild mustard
(*yellow woodsorrel & creeping woodsorrel)	(*sheep sorrel)	Wild onion
Parsley-piert	Roundleaf greenbriar	Wild strawberry
Pennsylvania smartweed	Shepherdspurse	Wild violet
Pennywort (*dollarweed)	Spotted spurge	Yarrow
Pepperweed	Spurge	Yellow rocket
Pigweed	Star-of-Bethlehem	
Pineappleweed	Sunflower	
Plantain	Thistle	
	Velvetleaf (*buttonweed)	
	Venice mallow	
	Veronica	

\*Synonyms

**STORAGE & DISPOSAL**

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

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

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

**CONTAINER DISPOSAL:** For Metal Containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

For Plastic Containers - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

**THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED.** This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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