

Broadleaf weed control – FAST!

SpeedZone® Broadleaf Herbicide for Turf provides exceptional broadleaf weed control – fast. In university and cooperator tests, SpeedZone applications have repeatedly controlled tough weeds like clover, plantain, ground ivy and spurge with a fast-acting cool-weather response exhibiting activity within hours.

SpeedZone contains an advanced chemistry for broadleaf weed control in turf. The mode of action inhibits a key enzyme in chlorophyll production. This causes cell membranes to rupture and rapidly disintegrate within hours. Weed death can occur within 7 to 14 days.

SpeedZone opens up more application opportunities than most herbicide products. SpeedZone excels in cool-weather weed control so applications can be made earlier in the spring and up to a killing frost in

the fall. Rain-fast in as little as three hours, there is less concern about weather interference. With SpeedZone you can reseed in one week. A low-odor formulation, SpeedZone can be applied without raising unnecessary concerns over pesticide applications.

SpeedZone is highly selective in established cool-season and warmseason turfgrasses. SpeedZone has a CAUTION signal word and good toxicological, environmental and ecological properties compared to standard herbicides.

When you use SpeedZone, your clients will see the fast results within days, thus reducing the number of call backs.

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® Checkered Flag/Label Design is a registered trademark of PBI-GORDON CORPORATION.





As shown in these before and after photos, SpeedZone eliminated clover from this lawn in 1-week.

- Fast weed control
- Outstanding broadleaf weed control for turf
- Visible activity in hours
- Effective, fast-acting cool-weather product
- Clover control in as little as 1-week
- Rain-fast in 3-4 hours
- Reseed in 1-week
- CAUTION signal word
- Low-odor formulation



RECOMMENDATIONS

Post-emergence broadleaf weed control in home lawns, golf courses, parks, commercial property, schools, sod farms, roadsides and cemeteries, especially where rapid visual results are an advantage.

ACTIVE INGREDIENTS:

Carfentrazone-ethyl*	0.62%
2,4-D, 2-ethylhexyl ester	28.57%
Mecoprop-p acid	5.88%
Dicamba acid	1.71%
Inert Ingredients	63.22%

*Carfentrazone-ethyl is a protox inhibitor, inhibiting a key enzyme in chlorophyll production which causes a disruption of plant cell membranes. Carfentrazone-ethyl is classified by the EPA as reduced risk chemistry.

EPA Reg. No. 2217-833

PACKAGING:

4 X i gallon per case:		
shipping weight	36	lbs.
2 X 2.5 gallons per case:		
shipping weight	46	lbs.
30-gallon drum: shipping weight2	298	lbs.
SpeedZone® Lawn Weed Killer		
12 X 20 ounce per case:		
shipping weight	20	lbs.

- READ LABEL BEFORE USE -

The literature contained herein is not intended to be used as a substitute for the information contained on the label of the product container. Specimen labels and other literature are subject to revision. Before using this product, read and follow all label instructions on the container/package.

pbigordon.com/speedzone

weedalert.com.



An Employee-Owned Company

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Not all products listed are available for purchase or authorized for use in every state. In addition, some states, counties and cities may require special licensing and training to sell, purchase or apply some of the products presented in this product literature. It is the responsibility of the distributor, retailer or professional applicator to verify, before product sale/purchase, that the product is approved for the use intended in their state, county and city.





ACTIVE INGREDIENTS:

Carfentrazone-ethyl	0.62%
2,4-D, 2-ethylhexyl ester	
Mecoprop-p acid	5.88%
Dicamba acid	
INERT INGREDIENTS:	63.22%
	TOTAL 100.00%

THIS PRODUCT CONTAINS:

0.05 lb. Ethyl α ,2-dichloro-5-[4(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate per gallon or 0.62% 1.53 lbs. 2,4-dichlorophenoxyacetic acid equivalent per gallon or 18.95%. 0.48 lb. (+)-R-2-(2-methyl-4-chlorophenoxy)propionic acid equivalent per gallon or 5.88%.

0.14 lb. 3,6-dichloro-o-anisic acid equivalent per gallon or 1.71%.

Isomer Specific by AOAC Methods.

Contains petroleum distillates.

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.)



PRECAUTIONARY STATEMENTS

Hazards to Human 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 barrier laminate, nitrile rubber, neoprene rubber or Viton If you want more options, follow the instructions for category E on a EPA chemical resistance category selection chart.

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

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

See engineering controls for additional requirements.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

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

User Safety Recommendations

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

First Aid	
If swallowed:	 Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
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. Call a poison control center or doctor for treatment advice.
If on skin or on clothing:	 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.
If inhaled:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. 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 information.

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

Environmental Hazards

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

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

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment 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. (cont. on next page)

Agricultural Use Requirements (cont.)

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

- coveralls worn over short-sleeved shirt and short pants,
- · chemical-resistant footwear plus socks,
- chemical-resistant gloves made of any water-proof material.
- chemical-resistant headgear for overhead exposure and protective eyewear.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

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

PRODUCT DESCRIPTION: Speed Zone® Broadleaf Herbicide for Turf (Speed Zone) 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.

Speed 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 to 14 days.

SPRAY PREPARATION AND TANK MIXTURES:

Speed Zone is an emulsifiable concentrate intended for dilution with water. In certain applications, liquid fertilizer may replace part of the water in the mixture.

Mixing with Water:

Add one-half the required amount of water to the spray tank, then add Speed 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. Storage of the spray mixture beyond 72 hours is not recommended.

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:

Use suitable sources and rates of fertilizer based upon local recommendations. Refer to the mixing directions on the labels of the liquid fertilizers (e.g. 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 to 175 gallons per acre with spray pressures adjusted to 20 to 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.

Hand-held techniques: 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 motions result in uneven coverage.

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).

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.

Spray Drift Management

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

Droplet Size

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

Wind Speed

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

Temperature Inversions

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

Susceptible Plants

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

Other State and Local Requirements

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

Equipment

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

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

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.

WHERE TO USE:

Speed 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

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

APPLICATION SCHEDULES:

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

Speed 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 with a minimum of 30 days between applications 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 anytime 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 Speed 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 Speed Zone.

For newly seeded areas:

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

Reseeding interval:

• Treated areas may be reseeded 1 week after application.

For newly sodded, sprigged, or plugged areas:

 The application of Speed 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 fully dormant bermudagrass, fully dormant zoysiagrass, and fully dormant buffalograss 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.

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.

Use rates and spray volumes of Speed Zone as a broadcast treatment for use on turfgrass are presented in Table 1.

TABLE 1. RATES FOR SOD FARMS, ORNAMENTAL LAWNS AND TURFGRASS							
Species	Amount of Product, Pints/ Acre	Recommended Spray Volume, Gallons/ Acre	Amount of Product, fl. oz./ 1,000 sq. ft.	Spray Volume, Gallons per 1,000 sq. ft.			
Cool-Season Turf							
Kentucky bluegrass, annual bluegrass, annual ryegrass, perennial ryegrass, tall fescue, red or fine leaf fescues, creeping bentgrass, colonial bentgrass (excluding golf greens)	3.0 to 5.0	3 to 175	1.1. to 1.8	0.1 to 4.0			
Mixtures of cool-season species in noncropland areas established for aesthetic purposes	3.0 to 5.0	3 to 175	1.1 to 1.8	0.1 to 4.0			
Mixtures of cool-season species in noncropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth bromegrass, and orchardgrass)	3.0 to 5.0	3 to 175	1.1 to 1.8	0.1 to 4.0			
Warm-Season Turf							
Common bermudagrass, hybrid bermudagrass, zoysiagrass and buffalograss	2 to 4	3 to 175	0.75 to 1.5	0.1 to 4.0			

- For warm-season turf, lower rates listed above should be used in warmer temperatures (above 80°F).
- Maximum control of weeds will be obtained with early to mid-spring or mid- to late-fall applications.

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

For dormant turf: Applications to fully dormant bermudagrass, fully dormant zoysiagrass, and fully dormant buffalograss are suggested. Avoid applications during winter-to-spring and fall-to-winter transition periods.

Limitations on broadcast treatments for ornamental turfgrass and sod farms:

The maximum application rate is 5.0 pints of product per acre per application (1.0 lb 2,4-D ae, 0.30 lb MCPP-p ae, and 0.09 lb dicamba ae per acre per application).

For ornamental turfgrass, the maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. For sod farms, the maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. The maximum seasonal rate is 10.0 pints of product per acre per year (2.0 lb. 2,4-D ae, 0.60 lb. MCPP-p ae, and 0.18 lb. dicamba ae per acre).

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

For Cool-Season Turfgrass: Mix 1.1 to 1.8 fl. oz. of Speed 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 to 1.5 fl. oz. of Speed 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 turf, lower rates listed above should be used in warmer temperatures (above 80°F).

Limitations on spot treatments to residential turfgrass:

Spot treatment is defined as a treatment area no greater than 1,000 sq. ft. per acre. The maximum application rate is 1.8 fl. oz. per 1,000 sq. ft. per application (0.3 lb MCPP-p acid equivalent per acre). The maximum number of spot treatments is limited to 2 per year with a minimum of 30 days between applications.

Hand-held techniques: 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 motions result in uneven coverage.

Speed 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.
- Rainfast period: Rainfall or irrigation occurring within 3 to 4 hours after application of this product may reduce the effectiveness.

Mowina:

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

BROADLEAF WEEDS CONTROLLED:

Speed Zone will control or suppress the following broadleaf weeds and will control or suppress other broadleaf weeds that are susceptible to 2.4-D.

BROADLEAF WEEDS

Annual fleabane Aster, white heath & white prairie **Bedstraw Beggarticks** Beggarweed. creeping Bindweed Birdsfoot trefoil Black medic Broadleaf plantain Buckhorn plantain Bull thistle Burclover Burdock, common Buttercup, creeping Carolina geranium
Carpetweed
Chickweed, common
Chicory
Cinquefoil
Clover
Cocklebur
Common mullien
Compassplant
Curly dock
Dandelion
Dayflower
Deadnettle
Dock
Dogfennel

Dovefoot geranium

English daisy False dandelion (*spotted catsear & common catsear) Field bindweed (*morningglory & creeping jenny) Field madder Field oxeye-daisy (*creeping oxeye) Field pennycress Filaree, whitestem & redstem Florida pusley Ground ivy (cont. on next column)

BROADLEAF WEEDS (cont.)

Groundsel Parsley-piert Hairy bittercress Pennsylvania Hawkweed smartweed Pennywort Healall (*dollarweed) Henbit Horsenettle Pepperweed Horseweed Pigweed Innocence Pineappleweed (Blue-eyed Mary) Plantain Jimsonweed Poison ivy Kochia Poison oak Knotweed Puncturevine Lambsquarters Purple cudweed Lawn burweed Purslane Lespedeza, common Ragweed Lesser celandine Redweed Mallow, common Red sorrel Matchweed (*sheep sorrel) Roundleaf greenbriar Mouseear chickweed Mustard Shepherdspurse Nettle Spotted spurge Spurge Old world diamond

Oxalis (*yellow Sunflower woodsorrel & Thistle creeping woodsorrel)

* Synonyms

flower

Velvetleaf (*buttonweed) Venice mallow Veronica (*corn speedwell) Virginia buttonweed Virginia creeper Western salsify White clover (*Dutch clover, honeysuckle clover, white trefoil & purplewort) Wild carrot Wild garlic Wild geranium Wild lettuce Wild mustard

Wild onion
Wild strawberry
Wild violet
Yarrow
Yellow rocket
and many other
broadleaf weeds

STORAGE AND DISPOSAL

Star of Bethlehem**

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 1 and 2.5 gallon container sizes:

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 30 gallon container size:

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

(cont. on next page)

^{**} Use higher rates for best results

STORAGE AND DISPOSAL (cont.)

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.

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in *Washington Toxics Coalition*, et.al. v. EPA, C01-0132C, (W.D. WA). For further information, please refer to http://www.epa.gov/espp/wtc/.

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.

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654/8-2009 AP051309 EPA REG. NO. 2217-833



An Employee-Owned Company

MANUFACTURED BY PBI/GORDON CORPORATION 1217 WEST 12TH STREET KANSAS CITY, MISSOURI 64101 www.pbigordon.com

Material Safety Data Sheet

Product Name: SPEED ZONE Broadleaf Herbicide for Turf

MSDS No.: 654-6 Version No.: 002 EPA Registration No.: 2217-833

1. Basic Information:

Manufacturer PBI/Gordon Corporation 1217 West 12th Street City, State, Zip: Kansas City, MO 64101

Information Contact: Environmental, Health & Safety Dept.

Information Telephone Number: (816) 421-4070 **Emergency Contact:** Chemtrec **Emergency Telephone Number:** (800) 424-9300 Last Update: 11/11/2009

Chemical State $oxed{\boxtimes}$ Liquid ☐ Gas ☐ Solid

Chemical Type: ☐ Pure



2	Health
1	Flammability
0	Reactivity
В	Pers. Protection

2. Ingredients:

_ nade ocore	•						SARA	OSHA	ACGIH	Other
CAS No. 1928434	Chemical Name 2,4-Dichlorophenoxyacetic acid, isooctyl	% Range	EHS	NTP	IARC	SUB Z	313	PEL	TLV	Limits
	(2-ethylhexyl) ester (2,4-D 2-EHE)	28.57%	N	N	Υ	N	Υ	NI	NI	NI
1918009	3,6-Dichloro-o-anisic acid (Dicamba)	1.71%	N	N	N	N	Υ	NI	NI	NI
128639021	Carfentrazone-ethyl	0.62%	N	N	N	N	N	NI	NI	NI
16484778	R(+)2(2-Methyl-4-chlorophenoxy) propionic acid (MCPP)	5.88%	N	N	Υ	N	N	NI	NI	NI

3. Hazardous Identification:

☐ Trade Secret

Hazard Category:

Acute Chronic ☐ Fire ☐ Pressure

Hazardous Identification Information:

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, MCPP, 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.

4. First Aid Measures:

Route(s) of Entry:

Skin contact, Inhalation, Ingestion

Health Hazards (Acute and Chronic):

EYES: Moderately irritating to eyes SKIN: Moderately irritating to the skin.

INHALATION: Moderately irritating to the mucous membranes. Inhalation of sprays may

cause burning sensations in the respiratory tract, resulting in coughing. INGESTION: May cause vomiting, with pain in the chest and abdomen, and diarrhea.

Inhalation may cause burning in the chest, with coughing. Prolonged inhalation sometimes causes dizziness. Ingestion usually leads to vomiting. Pain in the chest and abdomen, and diarrhea may follow. Headache, mental confusion, and bizarre behavior are early manifestations of severe poisoning, which may progress to unconsciousness.

Medical Conditions Generally Aggravated by Exposure:
Individuals with chronic skin disease or known sensitivity to chlorophenoxy compounds should either avoid using them or take strict precautions to avoid contact. (respirator, gloves, etc.)

Emergency and First Aid Procedures:

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give any liquid to the person.
- Do not give anything by mouth to an unconscious person.

- 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.
- · Call a poison control center or doctor for treatment advice.

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.

IF INHALED:

- . Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- · Call a poison control center or doctor for treatment advice.

Other Health Warnings:

Have the product container or label with you when calling a poison control center or doctor or

NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia

5. Fire Fighting Measures:

Flash Point: >200°F

F.P. Method: Pensky Martens CC Lower Explosive Limit: N Upper Explosive Limit: NI

Fire Extinguishing Media: Foam, CO2, dry chemical.

Special Fire Fighting Procedures:

Wear positive-pressure breathing apparatus and full protective clothing. Fight fire from maximum distance. Stay up-wind and out of low areas.

Unusual Fire and Explosion:

Fire fighting precautions would be the same as those used for any petroleum based oil product. Runoff from fire control area or dilution water may cause pollution. If surface water is contaminated, contact local authorities.

6. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Do not touch spilled material. See Section 8 for Personal Protective Equipment. Contain and absorb spilled material on Dri-Rite, sand or other inert absorbent. Collect into drums; cover and label for disposal. Flush area with water if possible

7. Handling and Storage:

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

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

Other Precautions:

Engineering Control Statements of non-WPS uses:

Containers over 1 gallon and less than 5 gallons: Persons engaged in open pouring of this product must also wear coveralls or a chemical resistant apron.

Containers of 5 gallons or more: Do not open-pour product from this container. A mechanical system (such as a probe and pump or spigot) must be used for transferring the contents of If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

8. Exposure Controls/Personal Protection:

Ventilation Requirements:

Good local ventilation is recommended; mechanical ventilation may be used if exposure limits may be exceeded.

Personal Protective Equipment:

Clothing Requirement Statement:

When mixing, loading, or applying this product, wear long-sleeved shirt, long pants, socks, shoes, chemical-resistant gloves and eye protection. It is recommended that safety glasses include front, brow, and temple protection.

Personal Hygiene Statement:

After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

PROTECTIVE CLOTHING: Wear long sleeves and pants; chemical-resistant gloves and shoes with socks

EYE PROTECTION: Safety glasses with side shields or safety goggles.

RESPIRATORY PROTECTION: If exposure limits may be exceeded, wear a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a NIOSH approved respirator with any R, P or HE filter.

9. Physical and Chemical Properties:

Boiling Point: >200°F Melting Point: NI

Evaporation Rate (Butyl Acetate = 1): <1

Vapor Pressure (mm Hg.): NI Vapor Density (AIR = 1): NI Specific Gravity (H20 = 1): 0.96650 Solubility In Water: Emulsifiable

Appearance and Odor: Amber liquid, ester odor

Other Information: pH = 2.92 for a 1% aqueous solution

Density = 8.05 pounds/gallon Freezing point <35°F Viscosity: 8.11 cps @ 23.8°C

10. Stability and Reactivity:

Stability:

Stable

Incompatibility (Materials to Avoid):

None known

Decomposition/By-Products:

May produce gases such as HCl, organo chlorides, nitrogen oxides, and carbon monoxide when burning.

Hazardous Polymerization:

Will not occur

11. Toxicological Information:

EYES: Moderately irritatiing to the eye.

SKIN: Moderately irritating to the skin. Acute demal LD50 is greater than 2,000 mg/kg for males, and between 1,000 and 2,000 for females. This product is considered to be a contact sensitizer.

INHALATION: Acute inhalation LC50 is greater than 2.06 mg/L in male and female rats

INGESTION: Acute oral LD50 is greater than 2,000 mg/kg for male and female rats.

12. Ecological Information:

Carfentrazone 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 2,4-D and MCPP-p have been associated with mixing, loading and disposal sites. Caution should be exercised when handling 2,4-D 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.

13. Disposal Considerations:

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.

14. Transport Information:

The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

Freight Class: PESTICIDES, NOI - NMFC #155050-6

In our current available sizes, this product does not qualify as a Hazardous Material.

15. Regulatory Information:

OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: This product is exempt from TSCA Regulation under FIFRA Section 3(2)(B)(ii) when used as a pesticide.

CERCLA REPORTABLE QUANTITY: 339 pounds of the formulation which contains 100 pounds of 2,4-D 2-ethylhexyl ester.

SARA TITLE II

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None

SECTION 311/312 HAZARD CATEGORIES: Immediate Health Hazard, Delayed Health Hazard

SECTION 313 TOXIC CHEMICALS: Dicamba CAS# 1918-00-9, 2,4-D 2-ethylhexyl ester CAS# 1928-43-4

RCRA STATUS: When discarded in its purchased form, this product is a listed RCRA hazardous waste and should be managed as a hazardous waste. (40 CFR 261.20-24)

16. Other Information:

REASON FOR ISSUE: New MSDS in the ANSI Z400.1-1998 format

Note: NI means not Indicated.

The information and statements in this Material Safety Data Sheet are believed to accurately reflect the scientific evidence used in making the hazard determination, but is not to be construed as a warranty or representation for which we assume legal responsibility. Additional information may be necessary or desirable depending on particular, exceptional or variable conditions or circumstances of use or storage or because of locally applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information available to you and must make independent determinations of the suitability of the information for your particular circumstances or conditions and of the completeness of the information available from all sources to assure both the proper use of the material described herein and the safety and health of employees.