POSTEMERGENCE CONTROL OF GRASSY WEEDS

General Information

PRODUCT DESCRIPTION: SpeedZone 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.

SpeedZone Broadleaf Herbicide for Turf offers these advantages:

- Excellent postemergent activity with proven performance for broad-leaf weed control in turfgrass.

- Superior cool weather performance.

- High selectivity (turfgrass safety) in established cool-season turfgrass and warm-season turfgrass.

- 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.

SpeedZone Broadleaf Herbicide for Turf 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 this product 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.

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:
SpeedZone Broadleaf Herbicide for Turf 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


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 this product are recommended for annual, biennial, and perennial weeds. Apply this product to broadleaf weeds that are young and actively growing for the best results. This product combines a contact herbicide with systemic herbicides and provides little or no residual activity at recommended use rates. SpeedZone Broadleaf Herbicide for Turf 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 this product. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to this product.

For newly seeded areas:
- The application of this product 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 this product 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 this product as a broadcast treatment for use on turfgrass presented in the table of the label.

Limitations, Restrictions, and Exceptions

POSTEMERGENCE CONTROL OF GRASSY WEEDS:
SpeedZone Broadleaf Herbicide for Turf will control or suppress specific annual grasses when applied at a rate of 4-5 pints/acre. Depending on timing of application, a second application may be needed for adequate control. If necessary, a second application may be made at the same rate, 30 days after the initial application. This product works best when applied while the annual grasses are small (pre-tiller) and actively growing, but control can be obtained at all growth stages. Some biotypes may show resistance to PPO inhibiting herbicides.

Method
- Broadcast/Foliar Ground

Rates

- **field_rates 0**

Restricted Entry Interval

48 hours

Timings

- Postemergence (Weed)