

WARM SEASON GRASS - BROADCAST APPLICATION

General Information

PRODUCT INFORMATION

PRODUCT USES

Derigo Herbicide may be used as a foliar spray to control annual and perennial broadleaf weeds and grasses in unimproved warm season grasses such as bermudagrass, centipedegrass, and zoysiagrass, and for use in bare ground sites. Derigo Herbicide can also be used to suppress seedheads and vegetative growth of bahiagrass to reduce mowing requirements. Derigo Herbicide controls weeds after they have germinated (postemergence) and will provide short-term residual control of some listed annual broadleaf and grassy weeds.

Derigo Herbicide may be used to manage weeds on private, public, and military lands such as Non-irrigation ditch banks, Pipelines, Highways, Airports, Railroads, Utility Rights-of-Way, Parks, Natural areas, Recreational areas, Military installations, Educational facilities, Restoration sites, Municipal sites, Manufacturing sites, Sewage disposal sites, Commercial sites and Industrial sites.

SYMPTOMS

Weed growth ceases within hours after a postemergence application. Symptoms progress from yellowing or reddening/purpling to eventual plant death within 1 to 4 weeks after application depending on the sensitivity of the weed and environmental conditions. Weed control is more rapid when average air temperatures are 65 degrees or greater, when soil moisture is adequate for weed growth, and when weeds are not under environmental stress.

MODE OF ACTION

Derigo Herbicide contains three active ingredients: thiencarbazone-methyl, iodosulfuron-methyl-sodium, and foramsulfuron. These active ingredients inhibit acetolactate synthase (ALS), an enzyme responsible for the synthesis of amino acids that are essential for plant growth. Some weed species have naturally occurring biotypes that are resistant to ALS-inhibiting herbicides. Resistant weed populations may occur when ALS herbicides are used repeatedly and when resistant management practices are not followed.

WARM SEASON GRASS TOLERANCE

Derigo Herbicide can be used on the following types of low maintenance grasses: bermudagrass (*Cynodon dactylon*), centipedegrass (*Eremochloe ophioroides*), and zoysiagrass (*Zoysia* species). All of these species show good tolerance to this product, however, some temporary discoloration of certain warm-season grasses may occur to turf under stress from drought, disease, extreme cold or hot weather.

Derigo Herbicide will suppress bahiagrass (*Paspalum notatum*) growth and seedhead development. Bahiagrass may be temporarily discolored following application depending on bahiagrass cultivars, herbicide rate, surfactant used, application timing, and environmental factors.

Other warm season grasses and their cultivars may be tolerant to this product, however tolerance testing should be done prior to use.

Do not use this product on cool-season grasses, including tall fescue, fine fescue, Kentucky bluegrass, perennial ryegrass, etc. unless control of these species is desired.

RESISTANCE MANAGEMENT

Repeated use of herbicides with the same mode of action may result in selection of resistant weed biotypes. Some weed biotypes are resistant to ALS herbicides. These biotypes will not be controlled by Derigo Herbicide. If resistance to ALS type herbicides is confirmed, rotate to an herbicide with an alternate mode of action. Consult a manufacturer representative for the latest information on resistance management practices for this product.

PRECAUTIONS

1. Do not use this product on cool-season grass types, including tall fescue, fine fescue, Kentucky bluegrass, perennial ryegrass unless control of these species is desired.
2. Rainfall within 2 hours of spray drying may result in reduced weed control and may necessitate retreatment.
3. Weeds should be actively growing when the herbicide application is made. Mature, hardened-off weeds may not be controlled. Weed control may be reduced if application is made when weeds are dust covered or in the presence of heavy dew,

fog, and mist/rain or when weeds are under stress due to drought.

4. Apply spray mixtures of this product within 5 days of mixing to avoid product degradation.

5. Do not mow immediately after application or before spray has dried or weed control may be reduced. After treatment, do not transfer clippings to non-target areas.

RESTRICTIONS

1. Do not apply more than a total of 6 oz product per acre per year (365 days).
2. Do not apply this product by air or through any type of irrigation system.
3. Apply this product to established warm season grasses only unless otherwise noted on the label.
4. Keep people and pets out of the area during application.
5. Do not allow people or pets to enter the treated areas until sprays have dried.
6. Do not use on residential or commercial turf, sod farms, or golf courses.

APPLICATION METHODS

Uniform, thorough spray coverage of the targeted weeds with properly calibrated spray equipment is important to achieve consistent weed control. Derigo Herbicide may be applied by broadcast or spot applications. Select spray nozzles and pressure that deliver at least MEDIUM spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASABE Standard S-572.1. Nozzles that deliver COARSE spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

Non-Irrigation Ditch Banks

It is permissible to treat non-irrigation ditch banks and transitional areas between upland and lowland sites. Derigo Herbicide can be used to the water's edge. Do not apply directly to water and take precautions to minimize spray drift onto water. Refer to spray drift management section of this label for more information.

USE OF SPRAY ADJUVANTS

Derigo Herbicide is a water dispersible granule (WDG) that requires the use of a surfactant for maximum weed control. Use the spray adjuvant(s) as specified in the WEED CONTROL section of this label or follow the recommendations below.

- Use a non-ionic surfactant (NIS) at 0.25 to 0.5% v/v of the spray solution that is at least 80% active material. Do not exceed 1 quart of NIS per acre as injury to

desirable grass species may occur.

- Use of a spray adjuvant containing an organosilicone surfactant is NOT recommended.
- For difficult-to-control weeds and perennial grasses, use 0.5 to 1% v/v of a methylated seed oil (MSO) containing at least 80% methylated seed oil.
- The addition of ammonium sulfate (AMS) or urea ammonium nitrate (UAN) has been shown to improve control of some difficult-to-control weeds. Use a spray grade AMS (1.5 to 3 lb/A) for areas of high relative humidity or use (UAN) (1.5-2 Qt/A) in areas of low relative humidity.
- Application of Derigo Herbicide with a spray adjuvant or nitrogen-containing fertilizers when temperatures are above 90 degrees or when desirable grasses are under stress may cause injury.

MIXING, COMPATIBILITY, AND CLEANUP

Spray Solution pH

The efficacy of this product may be affected by the pH of the spray solution. A pH near 7.0 is ideal. If the pH is <6 and if product spray solution is not to be used within 24 hours, add a suitable buffer.

WEED CONTROL INFORMATION

This product may be used to control a variety of broadleaf weeds and grasses in warm season perennial grasses listed on this label. Apply this product to susceptible weeds as listed in the Weed Control section of this label. For certain perennial and difficult to control annual weeds, a repeat application may be needed 4 to 6 weeks later if regrowth is observed. Total amount of product applied in a calendar year (365 days) must not exceed 6 oz of product per acre.

Limitations, Restrictions, and Exceptions

Broadcast Application

Apply Derigo Herbicide at a rate of 3 to 6 oz per acre as a broadcast spray to control the weeds listed in the WEEDS CONTROLLED Section of the label. Do not exceed the maximum amount of 6 oz per acre of this product per year applied as a broadcast spray. For broadcast applications, use a minimum of 10 gallons of water per acre. For weed control in dense weed populations, control of weeds under adverse growing conditions, or control of mature weeds, spray volume should be increased to obtain adequate spray coverage of targeted weeds.

Method

Broadcast Spray

Timings

Postemergence (Weed)