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# Derigo™ HERBICIDE

GROUP 2 HERBICIDE

For MEDICAL AND TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577  
For PRODUCT USE Information Call 1-800-331-2867

### ACTIVE INGREDIENTS:

Foramsulfuron (CAS Number 73159-57-4) ..... 24.0%  
 Iodosulfuron-methyl (CAS Number 144550-36-7) ..... 2.4%  
 Tosylurea (CAS Number 317815-83-1) ..... 63.5%  
**OTHER INGREDIENTS: .....** 10.0%

**TOTAL: .....** 100.0%

Derigo™ Herbicide is formulated as a 36.4% water dispersible granule  
EPA Reg No. 432-1533 EPA Est. No. 000264-DEU-001

**STOP - READ THE LABEL BEFORE USE  
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.)

Bayer

**Net Contents:**  
**60 Ounces**  
**(1.7Kg)**

Produced for  
 Bayer Environmental Science  
 A Division of Bayer CropScience LP  
 211 W. Alexander Drive  
 Research Triangle Park, NC 27709  
 US84127191A 140729AN2 Product of Germany

### FIRST AID

<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</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 swallowed:</b>	<ul style="list-style-type: none"> <li>Immediately call a poison control center or doctor for treatment advice.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

See inside leaflet for complete First Aid Instructions, Precautionary Statements, Directions for Use and Storage and Disposal Instructions.

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#### PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

**CAUTION**  
Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or on clothing. Wear long-sleeved shirt, long pants, socks, shoes, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

#### ENVIRONMENTAL HAZARDS

This product is toxic to non-target plants. Non-target plants may be adversely affected if the product is allowed to drift from the areas of application. Avoid spray drift from treated area. Do not apply when conditions favor drift from treated areas. 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 cleaning equipment or disposing of equipment washwaters or rinsate. Do not drain or rinse equipment near desirable vegetation. Refer to the Spray Drift Management section of this label for additional information.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having "high potential for reaching surface water via runoff" according to the chemical's "mean soil partition coefficient (Kd)" for several days after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this herbicide from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Some of the chemicals in this product have properties and characteristics associated with chemicals detected in ground water. These chemicals may leach into ground water if used in areas where soils are permeable, particu-

lately where the water table is shallow.

#### **DIRECTIONS FOR USE**

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

**Read entire label before using this product.**

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 same area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### **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 sprouts and regrowth of bermudagrass and other warm season grasses.

Derigo herbicide controls weeds after they have germinated (postemergence) and will provide short-term residual control of some listed annual broadleaf and grass weeds.

Derigo herbicide may be used to manage weeds on private, public, and military lands such as Non-Irrigation ditch banks, Peoples, Highways, Airports, Railroads, Utility Right-of-Way, Parks, Natural areas, Reservoirs, Military Installations, Education 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: thifencarbazone-methyl, iodosulfuron-methyl-sodium, and foramsulfuron. These active ingredients inhibit acetyl-coA carboxylase (ACCase), 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 (*Eriochloa spurioides*), 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 full under stress from drought, disease, extreme cold or hot weather.

Derigo herbicide will suppress bermudagrass (*Paspalum notatum*) growth and seedhead development. Bermudagrass may be temporarily discolorated following application depending on bermudagrass cultivar herbicide rate, surfactant used, application timing, 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 re-

sistance 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.

#### **SPRAY DRIFT MANAGEMENT:**

Drifted herbicide is not volatile. Damage to sensitive non-targeted plants can occur as a result of spray drift. Spray drift can be managed by several application factors and by spraying under the appropriate climatic conditions. Consequently, avoidance of spray drift is the responsibility of the applicator.

**Sensitive Areas.** Apply by broadcast application (boom-type sprayers) only when the potential for drift to adjacent sensitive areas (water bodies or non-target plants) is minimal (e.g., when wind is 10 mph or less and is blowing away from the sensitive areas). Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Do not apply under circumstances where possible drift to unprotected persons or to food, forage, desirable plants, or crops intended for sale, use, or consumption.

**Droplet Size.** Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Temperature and Humidity below). Select nozzles and pressure that deliver at least MEDIUM-sized spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASABE Standard S-572.1. Higher-flow-rate nozzles generally deliver larger droplet size and can help reduce drift potential. 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.

**Application Height.** To minimize spray drift, apply with nozzle height no more than 4 feet above the plant canopy unless necessitated by the application equipment.

**Temperature and Humidity.** When making applications in low relative humidity,

set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry. Avoid spraying during conditions of low humidity and/or high temperatures.

#### **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 cali-

brated spray equipment is important to achieve consistent weed control. Derrigo 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.

#### **Broadcast Application**

Apply Derrigo 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.

#### **Spot Application/ Directed Spray**

Apply with a hand held or high volume application sprayer. Apply a spray solution consisting of 3-6 oz product per 25 to 100 gallons as directed spray to targeted weeds until wet. For spot treatment, do not treat more than 10,000 sq. ft. per acre of treated area.

#### **Non-Irrigation Ditch Banks**

It is permissible to treat non-irrigation ditch banks and transitional areas between upland and lowland sites. Derrigo 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**

Derrigo Herbicide is a water dispersible granule (WDG) that requires the use of a surfactant for maximum weed control. Use the spray adjuvant(s) as spec-

ified 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) (1.5-2.0/A) in areas of low relative humidity.
- Application of Derrigo 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 <5 and if product spray solution is not to be used within 24 hours, add a suitable buffer.

##### **Mixing Instructions**

This product must be applied with clean and properly calibrated equipment. Prior to adding this product, ensure that the spray tank, filters, and nozzles have been thoroughly cleaned. Prepare only as much spray mixture as needed for application on the same day.

1. Fill spray tank with 25% to 50% of the required volume of water and begin agitation prior to the addition of this product.
2. Before filling or adding any additional products, ensure full dispersion of this product.
3. If this product is applied in a tank mixture with other products, add this