PERENNIAL WEEDS

General Information

PRODUCT INFORMATION

Product Description: This product is a postemergent, systemic herbicide with no residual soil activity. It is non-selective and gives broad-spectrum control of many annual weeds, perennial weeds, woody brush and trees. This product is formulated as a water-soluble granule containing surfactant and no additional surfactant is needed. Apply through most standard sprayers after dissolution and thorough mixing with water according to label instructions.

Time to Symptoms: This product moves through the plant from the point of foliage contact and into the root system. Visible effects on most annual weeds occur within 1 day, and on most perennial weeds in 2 days. Extremely cool or cloudy weather following treatment may slow activity of this product and delay development of visual symptoms. Visible effects are a quick yellowing of the foliage which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Mode of Action: One of the active ingredients in this product inhibits an enzyme found only in plants and microorganisms that is essential to formation of specific amino acids.

A second active rapidly disrupts cell integrity of photosynthetically active tissues in the contacted foliage.

Cultural Considerations: Reduced control may result when application is made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the specified stage for treatment.

Rainfastness: Heavy rainfall soon after application may wash this product off of the foliage and a repeat application may be required for adequate weed control.

Spray Coverage: Uniform and complete spray coverage will provide best results. Do not spray weed foliage to the point of runoff.
No Soil Activity: Weeds must be emerged at the time of application to be controlled by this product. Weeds germinating from seed after application will not be controlled. Plants growing from unattached underground rhizomes or root stocks of perennials that have not yet emerged at the time of application will not be affected by the herbicide and will continue to grow.

Annual Maximum Use Rate: The maximum allowed application rates apply to this product combined with the use of any and all other herbicides containing the active ingredient glyphosate, whether applied separately or as tank mixtures. If more than one glyphosate-containing product is applied to the same site within the same year, you must ensure that the total use of glyphosate (pounds acid equivalent) does not exceed the maximum allowed. For non-crop uses, the combined total of all treatments must not exceed 12.25 pounds of this product (8 pounds of glyphosate acid) per acre per year.

ATTENTION

AVOID CONTACT OF HERBICIDE WITH FOLIAGE, EXPOSED NON-WOODY ROOTS, OR DESIRABLE PLANTS AND TREES, BECAUSE SEVERE INJURY OR DESTRUCTION MAY RESULT.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to desirable plants or other areas on which treatment was not intended. The likelihood of injury occurring from the use of this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

NOTE: Use of this product in any manner not consistent with the label may result in injury to persons, animals or desirable plants, or other unintended consequences. Keep container closed to prevent spills and contamination.
Ground Broadcast Equipment

Use the labeled rates of this product in 10 to 80 gallons of water per acre as a
broadcast spray unless otherwise specified on the label or in separate supplemental
labeling or Fact Sheets published for this product. As the density of weeds
increases, increase the spray volume within the labeled range to ensure complete
coverage. Carefully select proper nozzles to avoid spraying a fine mist. For best
results with ground application equipment, use flat-fan nozzles. Check for even
distribution of spray droplets.

Backpack or Hand-Held Equipment

Apply to foliage of vegetation to be controlled on a spray-to-wet basis; do not spray
to the point of runoff. For best results, ensure that spray coverage is uniform and
complete.

Use coarse sprays only.

For control of weeds listed in the Annual Weeds section of the WEEDS CONTROLLED
section, apply 1.2 ounces of this product per 1 gallon of spray solution. See table in
Mixing for Hand-Held Sprayers section for larger mixing volumes.

For best results, use 1.5 ounces of this product per 1 gallon of spray solution on
harder-to-control perennials, such as bermudagrass, dock, field bindweed, hemp
dogbane, milkweed and Canada thistle. See table in Mixing for Hand-Held Sprayers
section for larger mixing volumes.

For low-volume directed spray applications, use 4.0 to 8.0 ounces of this product
per 1 gallon of spray solution for control or partial control of brush weeds. See table
in Mixing for Hand-Held Sprayers section for larger mixing volumes. Ensure spray
coverage is uniform with at least 50 percent of the foliage contacted. Coverage of
the top one-half of the plant is important for best results. To ensure adequate spray
coverage, spray both sides of brush and tree seedlings when foliage is thick and
dense, or where there are multiple sprouts.

CDA Equipment

The rate of this product applied per acre by controlled droplet application (CDA)
equipment must not be less than the amount stated in the label when applied by
conventional broadcast equipment. For vehicle mounted CDA equipment, apply 3 to 15 gallons of water per acre.

For hand-held CDA units, apply a solution of 1.5 to 2.0 pounds of this product in one gallon of water at a flow rate of 2 fluid ounces per minute and a walking speed of 0.75 mile per hour.

CDA equipment produces a spray pattern which is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation, as damage or destruction is likely to result.

WEEDS CONTROLLED

Always use the higher rate of this product per acre within the range when weed growth is heavy or dense or weeds are growing in an undisturbed (non-cultivated) area.

Reduced results may occur when treating weeds heavily covered with dust. For weeds that have been mowed, grazed or cut, allow regrowth to occur prior to treatment.

Refer to the following label sections for rates to control annual and perennial weeds.

For difficult to control perennial weeds and where plants are growing under stressed conditions, or where infestations are dense, this product may be used at up to 12.25 pounds per acre for enhanced results.

Refer in the label regarding tank mix information.

Limitations, Restrictions, and Exceptions

PERENNIAL WEEDS

Best results are obtained when perennial weeds are treated after they reach the reproductive stage of growth (seedhead initiation in grasses and bud formation in broadleaves). For non-flowering plants, best results are obtained when the plants reach a mature stage of growth. In many situations, treatments are required prior to these growth stages. Under these conditions, use the higher application rate within the range.

Use 4.5 to 9.0 pounds per acre of the product as a broadcast spray to control
perennial weeds. When using rates less than 9.0 pounds per acre, the level of fast-burn symptomology may be reduced.

For spray-to-wet applications, apply 1.5 ounces of the product per 1 gallon of spray solution. Ensure thorough coverage when using spray to-wet treatments using hand-held equipment.

When using hand-held equipment for low-volume directed spot treatments, apply 4.0 to 8.0 ounces of the product per 1 gallon of spray solution.

Allow 7 or more days after application before tillage.

NOTE:

- Partial control for the following perennial weeds: Alfalfa, Alligatorweed, Bentgrass, Bermudagrass, Clover (red, white), Kikuyugrass, Phragmites, Redvine, Spurge leafy, Torpedograss, Trumpet creeper.

Method

- **Broadcast/Foliar Ground**
- **Spot treatment**
- **Hand-Held Spray**
- **Broadcast/Foliar Ground**
- **Spot treatment**
- **Hand-Held Spray**

Rates

- **field_rates 0**
- **field_rates 1**
- **field_rates 2**

Timings

- **Preplant**
- **Postemergence (Weed)**