

# **TURFGRASSES AND GRASSES FOR SEED PRODUCTION - PERENNIAL WEEDS**

## General Information

### GENERAL INFORMATION

Do not apply this product using aerial spray equipment except under conditions as specified within the label. This product, a water-soluble liquid, mixes readily with water to be applied as a foliar spray for the control or elimination of most herbaceous plants. It may be applied through most standard industrial or field-type sprayers after dilution and thorough mixing with water in accordance with label instructions.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days, but on most perennial weeds may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise specified on the label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the "WEEDS CONTROLLED" section of the label.

Always use the higher rate of this product per acre within the recommended range when (1) weed growth is heavy or dense, or (2) weeds are growing in an undisturbed (non-cultivated) area.

Do not treat weeds under poor growing conditions such as drought stress, disease or insect damage, as reduced weed control may result. Reduced results may also occur when treating weeds heavily covered with dust.

Reduced control may result when applications are made to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the spray mixture off the foliage and a repeat treatment may be required.

This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

**DOMESTIC ANIMALS:** This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation may result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

If application rates for grass seed, sod production, general noncrop areas, industrial sites, pasture grass and rangeland total 3 quarts per acre or less, no waiting period between treatment and feeding or livestock grazing is required. If the rate is greater than 3 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

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

For questions or additional rate information contact your Nufarm representative.

#### FOR AERIAL APPLICATION IN CALIFORNIA ONLY

**EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE, GREEN STEMS, OR FRUIT OF DESIRABLE CROPS, PLANTS, TREES, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.**

## Noncrop Sites

When applied as directed and under the conditions described in the “Weeds Controlled” section of the label booklet for this product, this herbicide will control or partially control the labeled weeds growing in the following industrial, recreational and public areas, such as airports, ditch banks, dry ditches, dry canals, fencerows, golf courses, highways, industrial plant sites, lumber yards, manufacturing sites, office complexes, parking areas, parks, petroleum tank farms and pumping installations, pipelines, power and telephone rights-of-way, railroads, roadsides (guiderails, shoulders), schools, storage areas, utility substations, warehouse areas and other public areas.

**AVOID DRIFT - DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.**

Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop, and/or near other desirable vegetation or annual crops.

1. Do not apply within 100 feet of all desirable vegetation or crop(s).
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets.

Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure above the manufacturer’s recommendation.

Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

Ensure uniform application – to avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR IS MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.

FOR AERIAL APPLICATION IN FRESNO COUNTY, CALIFORNIA ONLY

From February 15 through March 31 only. For aerial application outside of these dates, refer to the “FOR AERIAL APPLICATION IN CALIFORNIA ONLY” section printed above.

#### APPLICABLE AREA

This supplement only applies to the area contained inside the following boundaries within Fresno County, California only.

North: Fresno County line

South: Fresno County line

East: State Highway 99

West: Fresno County line

#### GENERAL INFORMATION

Always read and follow the label directions and precautionary statements for all products used in the aerial application.

Observe the following directions to minimize off-site movement during aerial application of this herbicide. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor, and aerial applicator.

#### WRITTEN RECOMMENDATIONS

A written recommendation MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. This written recommendation MUST state the proximity of surrounding crops, and that conditions of each manufacturer's applicable product label(s) and the label have been satisfied.

#### BROADCAST EQUIPMENT

For control of annual or perennial weeds listed on the label using broadcast equipment - Use the recommended rates of this product per acre as a broadcast spray unless otherwise specified on the label. See the "WEEDS CONTROLLED" section of the label for specific rates.

#### HAND-HELD AND HIGH-VOLUME EQUIPMENT

##### Use Course Sprays Only

Mix this product in clean water and apply to foliage of vegetation to be controlled. For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do spray to the point of runoff.

For control of annual weeds listed on the label, apply a 0.5 percent solution of this product plus nonionic surfactant to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For agricultural uses, allow 3 or more days before tillage or mowing.

For annual weeds over 6 inches tall, or when not using additional surfactant, or unless otherwise specified, use a 1 percent solution.

For best results, use a 2 percent solution on harder-to-control [perennials, such as Bermudagrass, Dock, Field bindweed, Hemp dogbane, Milkweed and Canada thistle.] or [weeds.]

When using application methods which result in less than complete coverage, use a

5 percent solution for annual and perennial weeds and a 5 to 10 percent solution for woody brush.

See the “MIXING FOR HAND-HELD SPRAYERS” section of the label for specific rates.

## SELECTIVE EQUIPMENT

This product may be applied through a recirculating spray system, shielded and hooded applicators, or wiper applicators after dilution and thorough mixing with water to listed weeds growing in any noncrop site specified on the label and only when specifically recommended in cropping systems.

### SHIELDED AND HOODED APPLICATORS

When applied as directed under conditions described for shielded applicators, this product will control those weeds listed in the “WEEDS CONTROLLED” section of the label.

A hooded sprayer is a type of shielded applicator. The spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. If the hoods are raised, spray particles may escape and come into contact with the crop, causing damage or destruction of the crop. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground.

For specific rates of application and instructions for control of various annual and perennial weeds, see the “WEEDS CONTROLLED” section of the label.

### WIPER APPLICATORS

Wiper applicators are devices that physically wipe appropriate amounts of this product directly onto the weed.

Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Operate this equipment at ground speeds no greater than 5 mph. Performance may be improved by reducing speed in areas of heavy weed infestations to ensure adequate wiper saturation. Better

results may be obtained if 2 applications are made in opposite directions.

Avoid leakage or dripping onto desirable vegetation. Adjust height of applicator to ensure adequate contact with weeds. Keep wiping surfaces clean. Be aware that, on sloping ground, the herbicide solution may migrate, causing dripping on the lower end and drying of the wicks on the upper end of a wiper applicator.

Do not use wiper equipment when weeds are wet.

Mix only the amount of solution to be used during a 1-day period, as reduced activity may result from use of leftover solutions. Clean wiper parts immediately after using this product by thoroughly flushing with water.

Do not add surfactant to the herbicide solution for wiper applications.

For Rope or Sponge Wick-Applicators - Mix 1 gallon of this product in 2 gallons of water to prepare a 33 percent solution. Apply this solution to weeds listed in this "WIPER APPLICATORS" section.

For Porous-Plastic Applicators - Solutions ranging from 33 to 100 percent of this product in water may be used in porous-plastic wiper applicators.

Refer to the label regarding tank mix information.

For annual and perennial weeds and woody brush method of application and corresponding rates refer to application rate table in the label.

Limitations, Restrictions, and Exceptions

**TURFGRASSES AND GRASSES FOR SEED PRODUCTION PREPLANT AND RENOVATION**

When applied as directed for "NONCROP USES", under conditions described, this product controls most existing vegetation prior to the planting or renovation of either turfgrasses or grass seed production areas.

For specific rates of application and instructions for control of various annual and perennial weeds, and woody brush and trees, see the "WEEDS CONTROLLED" section of the label.

For maximum control of existing vegetation, delay planting to determine if any regrowth from escaped underground plant parts occurs.

Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm-season grasses, such as bermudagrass, summer or fall applications provide best control.

#### DO NOT DISTURB SOIL OR UNDERGROUND PLANT PARTS BEFORE TREATMENT.

Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts.

#### TURFGRASSES

Where existing vegetation is growing in a field or unmowed situation, apply this product to actively growing weeds at the stages of growth listed in the "WEEDS CONTROLLED" section of the label.

Where existing vegetation is growing under mowed turfgrass management in such sites as apartment complexes, residential areas and sod farms, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.

Desirable turfgrasses may be planted following the above procedures.

#### GRASSES FOR SEED PRODUCTION

Apply this product to actively growing weeds at the stages of growth recommended in the "WEEDS CONTROLLED" section of the label prior to planting or renovation of turf or forage grass areas grown for seed production.

DO NOT feed or graze treated areas within 8 weeks after application.

#### PERENNIAL WEEDS

#### AGRICULTURAL USES

Apply to actively growing grass and broadleaf weeds. To prevent seed production, applications should be made prior to seedhead formation. This product does not provide residual control; therefore, delay application until maximum weed



emergence. Repeat treatments may be necessary to control later germinating weeds. For maximum agronomic benefit, apply when weeds are 6 inches or less in height. Allow at least 3 days after treatment before tillage.

## HIGH-VOLUME BROADCAST APPLICATIONS

When applied as directed under the conditions described, this product will control the weeds listed below when water carrier volumes are 10 gallons or more for sufficient coverage. Apply 1 to 1.5 quarts of this product per acre plus additional surfactant according to the manufacturers rates and recommendations for of the surfactant. Use 1 quart per acre if weeds are less than 6 inches tall and 1.5 quarts per acre if weeds are over 6 inches tall. If weeds have been mowed, grazed or cut, allow adequate time for new growth to reach recommended stages prior to treatment. These rates will also provide control of weeds listed in the "LOW-VOLUME BROADCAST APPLICATION" section.

## PERENNIAL WEEDS RATE TABLE

Apply to actively growing perennial weeds. See "APPLICATION RATES TABLE" for recommended spray volumes. For other perennials listed on the label and not found in the table below, apply 3 to 5 quarts of this product per acre. Apply when actively growing and most have reached early head or early bud stage of growth. For agricultural uses, allow 7 or more days after application before tillage.

Additional surfactant may be used. If additional surfactant is to be used follow the manufacturers rates and recommendations for use of the surfactant.

Refer to perennial weeds section for specific information.

### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

### Rates

[field\\_rates 0](#)

[field\\_rates 1](#)

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### Restricted Entry Interval

4 hours

Timings

Postemergence (Weed)