

## **WARM SEASON TURFGRASS - ALL EXCEPT FLORIDA**

### General Information

#### GENERAL INFORMATION

Oryzalin 4 Pro herbicide is a preemergence surface-applied product for the control of many annual grasses and broadleaf weeds in ornamental plantings, bulbs, ground covers/perennials, established warm-season turfgrass, Christmas tree plantations, non-bearing trees and vines, and non-cropland and industrial sites.

Oryzalin 4 Pro is orange in color and may cause temporary discoloration of sprayed surfaces. If this discoloration is undesirable, it may be altered by using a commercially available colorant such as Blazon or removed by spraying surface with water or washing with an industrial cleaner immediately after application. Oryzalin 4 Pro may also be applied with mulch colorants, such as Mulch Magic or Nu-Mulch.

#### Treatment of Plant Species Not Listed on the Label for Oryzalin 4 Pro

Users who wish to use Oryzalin 4 Pro on plant species not recommended on the label may determine the suitability for use by treating a small number of such plants at a recommended rate. Prior to treatment of larger areas, the treated plants should be observed for any sign of herbicidal injury during 30-60 days of normal growing conditions to determine if the treatment is non-injurious to the target plant species. The user assumes responsibility for any plant damage or other liability resulting from use of Oryzalin 4 Pro on plant species not recommended on the label.

#### Aerial Application

DO NOT aerially apply this product.

#### Chemigation

DO NOT apply this product through any type of irrigation system.

#### Grazing

DO NOT graze or feed forage from treated areas to livestock.

## Precaution

Avoid spray drift to non-target areas when applying Oryzalin 4 Pro. Spray drift may result in reduced emergence of non-target plants adjacent to the treated area. Poor weed control may result if directions are not followed.

Over-application may result in crop injury or excessive soil residue.

## APPLICATION

### Soil Preparation

Oryzalin 4 Pro controls weeds growing from seed. Oryzalin 4 Pro will not control emerged weeds. Oryzalin 4 Pro does not control established weeds, weeds growing from stolons, rhizomes, or root pieces. Therefore, areas to be treated should be free of emerged weeds. Weed residues, pruning, and trash should be thoroughly mixed into the soil or removed prior to treatment. In field applications, the soil should be in good tilth and free of clods at the time of application.

### Ground Application

Apply Oryzalin 4 Pro as a directed spray to the soil surface or over the top of plants. Use only a properly calibrated, low-pressure, herbicide sprayer that will apply the spray uniformly. Use screens no finer than 50 mesh in nozzles and in-line strainers. Apply the appropriate rate of Oryzalin 4 Pro as outlined in APPROVED USES section of the label.

In all cases, use sufficient water volume to obtain uniform coverage and deliver the desired rate of Oryzalin 4 Pro to the treated area. The volume of water used is not critical as long as the desired rate of Oryzalin 4 Pro is delivered uniformly across the area treated. When calibrating, determine the volume of water delivered by the sprayer to a given area (100 Sq ft, 1 acre, etc.). Then mix the desired rate of Oryzalin 4 Pro in the amount of water required to cover the entire area to be treated. As the amount of water used (spray volume) decreases, the importance of accurate calibration and uniform application increases.

Check the sprayer daily to ensure proper calibration and uniform application. Maintain continuous agitation from mixing through application.

Avoid spray pattern skips and overlaps that may result in incomplete coverage or over-application.

### Hand Held or Backpack Sprayer Application

The amount of water used to apply Oryzalin 4 Pro herbicide is not critical, but should be sufficient for uniform coverage of the target area.

Calibrate by determining the volume of water required to treat 1,000 square feet. Use this calibration volume to determine the amount of water and Oryzalin 4 Pro herbicide needed to treat the target area (see the following calibration example). Note: Sprayer calibration (volume of spray needed to treat 1,000 square feet) will vary with each individual operator.

### ACTIVATION AND CULTIVATION

Oryzalin 4 Pro will remain stable on the soil surface up to 21 days following application. In the absence of timely rainfall, irrigation can be used to activate Oryzalin 4 Pro. A minimum of one-half (1/2) inch of rain or its equivalent in sprinkler irrigation is necessary to activate Oryzalin 4 Pro. If weeds begin to emerge due to lack of rainfall or irrigation, shallow cultivate 1-2 inches deep to destroy existing weeds, or remove them by hand. Shallow cultivation to a depth of 1-2 inches will enhance herbicidal effectiveness. If Oryzalin 4 Pro is not activated by rainfall, irrigation, or cultivation within 21 days of application, or existing weeds have not been removed, erratic weed control may result.

### Limitations, Restrictions, and Exceptions

#### Warm Season Turfgrasses

Oryzalin 4 Pro may be applied as a preemergence treatment for control of annual grasses and certain broadleaf weeds in established warm season turf including bahiagrass, bermudagrass, buffalograss, centipedegrass, St. Augustinegrass, zoysiagrass, and established tall fescue growing in warm season areas. Established turf is defined as a dense turf having a well-anchored root system and healthy vigorous top growth. Use Oryzalin 4 Pro only as a part of a total turf management program that includes good fertilization practices.

Oryzalin 4 Pro may be tank mixed with Gallery herbicide and applied preemergence

to broaden the spectrum of broadleaf weed control in warm season turf. Refer to the label for Gallery for specific use directions, precautions, and limitations before use.

Any cultural practices that disturb the soil, such as aerification or verticutting, should be done prior to application of Oryzalin 4 Pro.

Oryzalin 4 Pro will not control emerged weeds. Successful preemergence control of weeds listed on the label requires that Oryzalin 4 Pro be applied prior to weed germination and be activated by at least one-half (1/2) inch of rainfall or irrigation within 21 days of application.

Oryzalin 4 Pro may injure turf that is not well-established or is stressed or weakened due to unfavorable winter climatic conditions, drought, nematodes, or other factors which damage or weaken turf root systems.

Apply Oryzalin 4 Pro only to healthy, well-established turf that has a well-anchored root system.

DO NOT apply Oryzalin 4 Pro in the spring or early summer to tall fescue turfgrass reseeded the previous fall. In such cases, apply Balan 2.5G granular herbicide at 60-80 pounds per acre in early summer (Round 1) and Oryzalin 4 Pro at 1.5 quarts per acre approximately eight weeks later (Round 2). DO NOT apply Oryzalin 4 Pro at the single application rate (2 quarts per acre) to established tall fescue; in such cases, apply 1.5 quarts per acre of Oryzalin 4 Pro in an initial application, followed by a second application of 1.5 quarts per acre 8- 10 weeks later.

In Bermudagrass areas that have been overseeded with winter grasses, a spring application of Oryzalin 4 Pro will thin the overseeded grasses.

#### Application Rates, Frequency, and Timing of Application

Oryzalin 4 Pro can be applied in the spring for summer annual grass and broadleaf weed control, and in the fall for annual bluegrass (*Poa annua*) and winter annual broadleaf weed control.

Minimum Time Between Applications (Months): 3

#### Application Equipment

Apply Oryzalin 4 Pro evenly over the turfgrass area. Avoid spray pattern skips and overlaps that may result in incomplete coverage or overapplication.

For best results, use application equipment designed to uniformly broadcast liquid herbicides. Calibrate application equipment prior to use, according to manufacturer's directions. Check equipment frequently to make sure it is working properly and distributing spray uniformly.

### Reseeding

Herbicides that control annual weeds may also affect establishment of desirable turfgrass seedlings. Reseeding should be delayed for at least 90-120 days following application of Oryzalin 4 Pro. When reseeding, it is essential that proper cultural practices such as soil cultivation and seedbed preparation, irrigation, and fertilization be followed. For satisfactory reseeding results following use of Oryzalin 4 Pro the seeding rate should be increased and equipment designed to place seed in full contact with soil (such as the Rogers Aero Seeder) should be employed.

### Special Use Precautions

To avoid possible injury, DO NOT apply Oryzalin 4 Pro to:

- Cool season turfgrass species.
- Golf course putting greens and tees or lawns containing dichondra or cool season turfgrass species.
- Newly sprigged or sodded areas of bermudagrass, St. Augustinegrass, centipedegrass, or zoysiagrass until these turfgrasses are well-established and have well-anchored root systems.
- Newly hydromulched areas of bermudagrass until such areas are well-established.
- Bermudagrass variety "Sun Turf" when tank mixed with atrazine.

### Method

[Broadcast/Foliar Ground](#)

### Rates

[field\\_rates 0](#)

## field\_rates 1

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Restricted Entry Interval

24 hours

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Timings

Preemergence (Weed)