

# **CEREALS, PASTURE, RANGELAND, AND FALLOW**

## General Information

### GENERAL INFORMATION

Purestand herbicide is recommended for use on land primarily dedicated to the production of wheat, barley, fallow, pasture, and rangeland.

Purestand is recommended for use on wheat, barley, fallow, pasture and rangeland in most states, check with your state extension or Dept. of Agriculture before use, to be certain Purestand is registered in your state. Purestand is not registered for use in Alamosa, Conejos, Costilla, RioGrande, and Saquache counties of Colorado.

Purestand is a dry-flowable granule that controls weeds in wheat (including durum), barley, pasture, rangeland grasses, and fallow. Purestand is mixed in water or can be preslurried in water and added to liquid nitrogen carrier solutions and applied as a uniform broadcast spray. A surfactant should be used in the spray mix unless otherwise specified on the label. Purestand is noncorrosive, nonflammable, nonvolatile, and does not freeze.

Purestand controls weeds by postemergence activity. For best results, apply Purestand to young, actively growing weeds. The use rate depends upon the weed spectrum and size of weeds at application. The degree and duration of control may depend on the following factors:

- weed spectrum and infestation intensity
- weed size at application
- environmental condition at and following treatment

### PRECAUTIONS

- Injury to or loss of desirable trees or vegetation may result from failure to observe the following:
- Do not apply, drain, or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may

be washed or moved into contact with their roots.

- Do not use on lawns, walks, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
- Do not use on grasses grown for seed.
- Do not apply to irrigated land where tailwater will be used to irrigate crops other than wheat and barley.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.
- Wheat and barley varieties may differ in their response to various herbicides. Nufarm recommends that you first consult your state experiment station, university, or extension agent as to sensitivity to any herbicide. If no information is available, limit the initial use of Purestand to a small area.
- Under certain conditions such as heavy rainfall, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after Purestand application, temporary discoloration and/or crop injury may occur. Purestand should not be applied to wheat or barley that is stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage, as crop injury may result. Risk of injury is greatest when crop is in the 2 to 5- leaf stage. Severe winter stress, drought, disease, or insect damage following application also may result in crop injury.
- The combined treatment effects of Purestand postemergence preceded by preemergence wild oat herbicides may cause crop injury to spring wheat when crop stress (soil crusting, planting too deep, prolonged cold weather, or drought) causes poor seedling vigor.
- In the Pacific Northwest, to prevent cold weather-related crop injury, avoid making applications during winter months when weather conditions are unpredictable and can be severe.

- Do not apply to wheat, barley or pastures undersown with legumes, as injury to the forage may result.
- To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, trashy mulch, reduced tillage, or other cultural practices. Injury to immediately adjacent crops may occur when treated soil is blown onto land used to produce crops other than cereal grains or pasture/rangeland.
- For ground applications applied to weeds when dry, dusty field conditions exist, control of weeds in wheel track areas may be reduced. The addition of 2,4-D or MCPA should improve weed control under these conditions.
- Preplant or preemergence applications of 2,4-D or herbicides containing 2,4-D made within 2 weeks of planting spring cereals may cause crop injury when used in conjunction with early postemergence applications of Nufarm Purestand. For increased crop safety, delay Purestand treatment until crop tillering has begun.

#### Ground Application

To obtain optimum spray distribution and thorough coverage, use flat-fan or low-volume flood nozzles.

For flood nozzles on 30" spacings, use at least 10 gallons per acre (GPA), flood nozzles no larger than TK10 (or equivalent), and a pressure of at least 30 pounds per square inch (psi). For 40" nozzle spacings, use at least 13 GPA; for 60" spacings, use at least 20 GPA. It is essential to overlap the nozzles 100% for all spacings.

With "Raindrop RA" nozzles, use at least 30 GPA and ensure that nozzle spray patterns overlap 100%.

For flat-fan nozzles, use at least 3 GPA for applications to wheat or barley. Use at least 10 GPA for applications to pasture or rangeland.

Use 50-mesh screens or larger.

#### Aerial Application

Use nozzle types and arrangements that provide optimum spray distribution and

maximum coverage.

Wheat, Barley and Fallow—use 1 to 5 GPA. Use at least 3 GPA in Idaho, Oregon, or Utah.

Pasture and Rangeland—Use 2 to 5 GPA.

When applying Purestand by air in areas adjacent to sensitive crops, use solid stream nozzles oriented straight back. Adjust the swath to avoid spray drift damage to sensitive crops downwind and/or use ground equipment to treat the border edge of fields. See the Spray Drift Management section of the label.

#### Application Timing—Pasture Grasses

Purestand may be used on some native grasses such as bluestems and grama, and on other pasture grasses such as bermudagrass, bluegrass, orchardgrass, brome grass, fescue and timothy. See specific application information on several of these pasture grasses in the label.

#### Fescue Precautions:

Note that Purestand may temporarily stunt fescue, cause it to turn yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- tank mix Purestand with 2,4-D
- use the lowest recommended rate for target weeds
- use surfactant at 1/2 to 1 pt per 100 gal of spray solution (1/16 to 1/8% v/v)
- make application later in the spring after the new growth is 5 to 6 inches tall, or in the fall.
- Do not use surfactant when liquid nitrogen is used as a carrier.

The first cutting yields may be reduced due to seedhead suppression resulting from treatment with Purestand.

#### Timothy Precautions:

Timothy should be at least 6" tall at application and be actively growing.

Applications of Purestand to timothy under any other conditions may cause crop

yellowing and/or stunting. To minimize these symptoms, take the following precautions:

- tank mix Purestand with 2,4-D
- use the lowest recommended rate for target weeds
- use surfactant at 1/2 pt per 100 gal (1/16% v/v)
- make applications in the late summer or fall
- Do not use surfactant when liquid nitrogen is used as a carrier.

Ryegrass Pastures (Italian or perennial): Do not apply Purestand as injury to or loss of the pasture may result.

Other Pastures: Varieties and species of pasture grasses differ in their tolerance to herbicides. When using Purestand on a particular grass for the first time, limit use to one container. If no injury occurs throughout the season, larger acreage may be treated the following season.

Broadleaf pasture species, such as alfalfa and clover, are highly sensitive to Purestand and will be severely stunted or injured by Purestand.

For the tank mix in grain sorghum refer in the supplemental label.

#### Limitations, Restrictions, and Exceptions

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Effectiveness may be reduced if rainfall occurs within 4 hrs after application.

Blue/purple mustard, Flixweed, Kochia, Prickly lettuce, Russian thistle: See the Specific Weed Problems section of the label.

#### Application Timing—Wheat and Barley

##### Dryland Wheat and Barley

(Except Durum or Wampum Variety)

Make applications after the crop is in the 2-leaf stage but before boot.

## Durum and Wampum Variety Spring Wheat

Make applications after the crop is tillering but before boot.

Applications to durum and wampum varieties should be made in combination with 2,4-D.

## Irrigated Wheat and Barley

Make applications after the crop begins tillering but before boot. First post-treatment irrigation should be delayed for least 3 days after treatment and should not exceed 1 in. of water

## Wheat and Barley—Harvest Aid

Make applications after the crop has reached the hard dough stage, but no later than 10 days before harvest.

See section on Harvest Aid tank mixtures.

## Fallow

Purestand may be used as a fallow treatment, in the spring fall when the majority of weeds have emerged and are actively growing.

Do not apply during boot or early heading, as crop injury may result.

## Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

## Rates

[field rates 0](#)

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## Restricted Entry Interval

4 hours

## Timings

[Postemergence \(Weed\)](#)