

## **PREPLANT BURNDOWN - WEEDS CONTROLLED**

### General Information

NUANCE should be used only in accordance with instructions on the label or in separately published Cheminova, Inc. instructions.

Cheminova, Inc. will not be responsible for losses or damages resulting from the use of this product in any manner not specified by Cheminova.

NUANCE may be used on wheat, barley, triticale, post-harvest burndown, fallow and pre-plant burndown in most states. Check with your state extension service or Department of Agriculture before use, to be certain NUANCE is registered in your state.

NUANCE is a water dispersible granule that is used for selective postemergence weed control in wheat (including durum), barley, triticale, post-harvest burndown, fallow and pre-plant burndown weed control. The best control is obtained when NUANCE is applied to young, actively growing weeds. The use rate will depend on weed spectrum and size of weed at time of application. The degree and duration of control may depend on the following:

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

NUANCE is noncorrosive, nonflammable, nonvolatile, and does not freeze. NUANCE should be mixed in water and applied as a uniform broadcast spray.

### **BIOLOGICAL ACTIVITY AND ENVIRONMENTAL CONDITIONS**

NUANCE is absorbed through the foliage of broadleaf weeds, rapidly inhibiting their growth. Leaves of susceptible plants appear chlorotic from 1 to 3 weeks after application and the growing point subsequently dies.

NUANCE provides the best control in vigorously growing crops that shade competitive weeds.

Weed control in areas of thin crop stand or seeding skips may not be as satisfactory. However, a crop canopy that is too dense at application can intercept spray and reduce weed control. NUANCE may injure crops that are stressed from adverse environmental conditions (such as extreme temperatures or moisture), abnormal soil conditions, or cultural practices. In addition, different varieties of the crop may have differing levels of sensitivity to treatment with NUANCE under otherwise normal conditions.

Treatment of sensitive crop varieties may injure crops. To reduce the potential of crop injury, tank mix NUANCE with 2,4-D (ester formulations perform best-see the Tank Mixtures section of the label) and apply after the crop is in the tillering stage of growth.

In warm, moist conditions, the expression of herbicide symptoms is accelerated in weeds: in cold, dry conditions, expression of herbicide symptoms is delayed. In addition, weeds hardened-off by drought stress are less susceptible to NUANCE

Weed control may be reduced if rainfall or snowfall occurs soon after application. Several hours of dry weather are needed to allow NUANCE to be sufficiently absorbed by weed foliage.

## RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide

applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or herbicide guidance available in your area.

## INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

## PRECAUTIONS

- Varieties of wheat (including durum), barley and triticale may differ in their response to various herbicides. Consult your state experiment station, university, or extension agent as to crop sensitivity to any herbicide. If no information is available, limit the initial use 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 NUANCE application, temporary discoloration and/or crop injury may occur. To reduce the potential of crop injury, tank mix NUANCE with 2,4-D (ester formulations perform best - see the \"TANK MIXTURES\" section of the label) and apply after the crop is in the tillering stage of growth.

- NUANCE should not be applied to wheat, barley or triticale 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.
- Do not apply to wheat, barley or triticale underseeded with another crop.
- Dry, dusty field conditions may result in reduced control in wheel track areas.
- Injury to or loss of desirable trees or vegetation may result from failure to observe the following:
  - a. 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.
  - b. Do not use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants.
- Injury to or loss of adjacent sensitive crops and vegetation may result from failure to observe the following:
  - a. Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with non-target plants or areas.
  - b. Carefully observe all sprayer cleanup instructions both prior to and after using this product, as spray tank residue may damage crops other than wheat or barley.

#### Limitations, Restrictions, and Exceptions

#### USE RATE

Apply 0.17 to 0.33 ounce NUANCE per acre to wheat (including durum), barley, triticale, fallow and pre-plant burndown. Two applications of NUANCE may be made per season provided the total amount applied does not exceed 0.33 ounce per acre.

#### PREPLANT BURNDOWN

Apply NUANCE at 0.17 to 0.33 ounce per acre as a burndown treatment prior to planting any crop, or shortly after planting wheat (including durum), barley or

triticale (prior to emergence). Use the higher rate when weed infestation is heavy and predominantly consists of those weeds listed under the “WEEDS PARTIALLY CONTROLLED” section of the label, or when application timing and environmental conditions are marginal. (See the “APPLICATION TIMING” section of the label for restriction on planting intervals).

Sequential treatments of NUANCE may be made provided the total amount of NUANCE applied during one fallow/pre-plant cropland season does not exceed 0.33 ounce per acre. NUANCE should be applied in combination with other suitable registered pre-plant burndown herbicides (See the “TANK MIXTURES” section of the label for additional information).

#### NOTES:

- Dandelion; Deadnettle; Henbit; Marestalk; Parsnip; Poison hemlock; Russian Thistle: 2,4-D LVE addition required.
- Prickly lettuce; Shepherdspurse: 2,4-D LVE addition recommended.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

#### Rates

[field rates 0](#)

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#### Restricted Entry Interval

12 hours

#### Timings

[Preplant](#)

[Postemergence \(Weed\)](#)