



DuPont Agricultural Products

"..... A Growing Partnership With Nature"



SUPPLEMENTAL LABELING

ASSURE® II HERBICIDE  
FOR POSTEMERGENCE  
GRASS CONTROL IN  
SUGAR BEET

ASSURE® II HERBICIDE

EPA REG. NO. 352-541

FOR POSTEMERGENCE GRASS CONTROL IN SUGAR BEET

**ACCEPTED**  
MAR 17 1997  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under:  
EPA Reg. No. 352-541

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

DuPont "Assure" II Herbicide is a selective postemergence herbicide recommended for control of annual and perennial grasses in sugar beet. Applied at recommended rates and timings, "Assure" II Herbicide will control emerged grasses. Subsequent flushes of grasses require additional treatment.

HOW TO USE

Ground Application

Broadcast Application

- Use flat fan or hollow cone nozzles at 25-60 psi.
- Do not use flood, rain drop, whirl chamber, or any other nozzle types that produce coarse, large spray droplets. In addition, do not use controlled droplet applicator (CDA) type nozzles as poor weed control or excessive spray drift may result.
- Use a minimum of 10 gal of water per acre
- Increase spray volume and pressure as weed or crop density and size increase.
- Do not exceed 40 gal of water per acre or control will be reduced.
- Adjust the boom and nozzle height according to the nozzle manufacturer's specifications to obtain proper spray coverage.

Aerial Application

- Use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.
- Use a minimum of 3 gal of water per acre.
- Do not apply during a temperature inversion, when winds are gusty, or when other conditions favor poor coverage and/or off-target spray movement.

See full label for spray drift management and sprayer cleanout directions.

Weeds Controlled/Rate Charts

Apply "Assure" II Herbicide for control of the grasses listed below at the range indicated.

| Annual Grasses   | Size at Application (inches) | "Assure" II Oz Product/A |
|--|------------------------------|--------------------------|
| Barnyardgrass ( <i>Enchinochloa crus-galli</i> )       | 2-8                          | 8                        |
| Broadleaf signalgrass ( <i>Bracharia platyphylla</i> ) | 2-4                          | 8                        |
| Crabgrass, large ( <i>Digitaria sanguinalis</i> )      | 2-4*                         | 8                        |
| Crabgrass, Smooth ( <i>Digitaria ischaemum</i> )       | 2-6*                         | 8                        |
| Crowfootgrass ( <i>Dactyloctenium aegyptium</i> )      | 2-6                          | 8                        |
| Downy brome ( <i>Bromus tectorum</i> L.)               | 2-4                          | 8                        |
| Fall panicum ( <i>Panicum dichotomiflorum</i> )        | 2-6                          | 8                        |
| Field Sandbur( <i>Cenchrus incertus</i> )              | 2-6                          | 8                        |
| Foxtails:  |                              |                          |
| Bristly foxtail ( <i>Setaria verticillata</i> )        | 2-4                          | 8                        |
| Giant ( <i>Setaria faberi</i> )                        | 2-8                          | 8                        |
| Green ( <i>Setaria viridis</i> )                       | 2-4                          | 8                        |
| Yellow ( <i>Setaria lutescens</i> )                    | 2-4                          | 8                        |
| Goosegrass ( <i>Eleusine indica</i> )                  | 2-6*                         | 8                        |
| Itchgrass ( <i>Rottboellia exaltata</i> )              | 2-8                          | 8                        |
| Johnsongrass, seedling ( <i>Sorghum halepense</i> )    | 2-6                          | 6                        |
| Junglerice ( <i>Echinochloa colonum</i> )              | 2-4                          | 8                        |
| Red Rice ( <i>Oryza sativa</i> )                       | 1-4                          | 10                       |
| Shattercane ( <i>Sorghum bicolor</i> )                 | 6-10                         | 6                        |
| Soft chess ( <i>Bromus mollis</i> L.)                  | 2-6                          | 10                       |
| Spangletop ( <i>Leptochloa filiformis</i> )            | 2-6                          | 8                        |
| Texas panicum ( <i>Panicum texanum</i> )               | 2-4                          | 8                        |
| Volunteer Cereals:                                     |                              |                          |
| Wheat ( <i>Triticum aestivum</i> )                     | 2-6                          | 8                        |
| Barley ( <i>Hordeum vulgare</i> )                      | 2-6                          | 8                        |
| Oats ( <i>Avena sativa</i> )                           | 2-6                          | 8                        |
| Rye ( <i>Secale cereale</i> )                          | 2-6                          | 8                        |
| Volunteer corn ( <i>Zea mays</i> )                     | 6-10                         | 6                        |
| Wild oat ( <i>Avena fatua</i> )                        | 2-6                          | 8                        |
| Wild-proso millet ( <i>Panicum miliaceum</i> )         | 2-6                          | 6                        |
| Witchgrass ( <i>Panicum capillare</i> )                | 2-6                          | 8                        |
| Woolly Cupgrass ( <i>Eriochloa villosa</i> )           | 2-4**                        | 10                       |

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| Perennial Grasses                                  | Size at Application (Inches)     | "Assure" II Oz Product/A |
|--|----------------------------------|--------------------------|
| Bermudagrass ( <i>Cynodon dactylon</i> )           | 3" tall<br>(or up to 6" runners) | 10                       |
| Johnsongrass, rhizome ( <i>Sorghum halepense</i> ) | 10-16                            | 10                       |
| Quackgrass ( <i>Agropyron repens</i> )             | 6-10                             | 10                       |
| Wirestem Muhly ( <i>Muhlenbergia frondosa</i> )    | 4-8                              | 8                        |

If perennial grasses regrow, reapply ASSURE II at 6-7 oz per acre. Application timing should be as follows: bermudagrass (3" tall or up to 6" runners), rhizome johnsongrass (6"-10"), quackgrass (4"-8"), wirestem muhly (4"-8").

**\*Length of lateral growth**

\*\*Size in height or diameter, whichever is more restrictive. Applications to plants with more than three tillers may result in unsatisfactory control.

**Spray Additives**

Always include a nonphytotoxic petroleum based crop oil concentrate at 1% v/v (4 qts/100 gals) or a nonionic surfactant at 0.25% v/v (1 qt/100 gals). Crop oil concentrate is the preferred adjuvant in arid areas.

**Tank Mix Applications**

Tank mixtures of "Assure" II with any pesticide or spray adjuvant is not recommended except as directed on this label or on other supplemental labels.

Tank mixes of "Assure" II with postemergence broadleaf herbicides may result in reduced grass control. If grass control is reduced, an additional application of "Assure" II may be required after grass plants begin to develop new leaves.

**Sequential Applications with Post Broadleaf Herbicides**

NOTE: Reduction in grass control is possible when "Assure" II is applied immediately prior to or sequentially after an application of a post broadleaf herbicide. Observe the following recommendations:

- After applying "Assure" II, wait a minimum of 24 hours before applying a post broadleaf herbicide.
- In fields treated with a post broadleaf herbicide, reduced control may result if applications of "Assure" II are made prior to grass plants beginning to develop new leaves (generally 5-7 days after the post broadleaf herbicide application).

**Precautions**

- Rainfall within 1 hour of application will reduce grass control from "Assure" II.
- Applications to grassy weeds suffering stress from lack of moisture, cold, herbicide injury, and insect or disease injury may result in reduced control. A sequential application of ASSURE II at 6-7 oz per acre after growth resumes may be necessary for satisfactory control.

**Restrictions**

- Do not apply Assure II within 45 days of beet harvest.
- The maximum use rate of "Assure" II is 25 oz per acre per season.
- Do not feed beet tops within 60 days of last application.
- Do not apply more than 4 applications per acre per season.. Application intervals should be greater than 7 days apart to allow regrowth to occur.
- Do not apply "Assure" II through any type of irrigation system.
- Most grass crops, including wheat, barley, rye, oats, sorghum, rice, and corn are highly sensitive to "Assure" II Herbicide and all direct or indirect contact (such as spray drift) should be avoided.

**Resistance**

Biotypes of certain weeds listed on this label are resistant to Assure II, and other herbicides with the same mode of action,\* even at exaggerated application rates. Biotypes are naturally occurring individuals of a species identical in appearance but with slightly different genetic compositions; the mode of action of a herbicide is the chemical interaction that interrupts a biological process necessary for plant growth and development.

If weed control is unsatisfactory, it may be necessary to respray problem areas using a product with a different mode of action. If resistant weed biotypes (such as Wild Oats), are suspected or known to be present, consider using a planned herbicide rotation program to help control these biotypes. To better manage weed resistance when using ASSURE II use a combination of tillage and sequential herbicide applications that have a different mode of action than ASSURE II, to control escaped weeds. Do not let weed escapes go to seed.

Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative herbicide recommendations available in your area. 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.

\* Naturally occurring weed biotypes that are resistant to Hoelon or Poast, will also be resistant to Assure II.

**IMPORTANT**

**BEFORE USING "ASSURE" II, READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA-REGISTERED LABEL.**

This bulletin contains new or supplemental instructions for use of this product which do not appear on the EPA-registered package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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