

DRY BEANS, DRY AND SUCCULENT PEAS IN ID, MT, OR AND WA - PERENNIAL GRASSES (8 TO 10 FLUID OUNCES PER ACRE)

General Information

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

Dupont Assure II is a systemic herbicide that is rapidly absorbed by treated foliage and translocated to the roots and other growing points of the plant. When affected, younger plant tissues become chlorotic/necrotic and eventually die, leaving treated plants stunted and noncompetitive. In general, these symptoms are first observed within 7 to 14 days after application depending on the grass species treated and the environmental conditions.

The degree of control and duration of the effect of Assure II depend upon the rate used, weed spectrum, weed size and variability, growing conditions at and following treatment, soil moisture, precipitation, tank mixtures, and spray adjuvant used.

Conditions conducive to healthy, actively growing plants optimize the performance of Assure II. unacceptable control may occur if Assure II is applied to grasses stressed from:

- abnormal weather (excessive heat or cold, or widely fluctuating temperatures),
- hail damage,
- drought,
- water saturated soils,
- mechanical injury, or
- prior herbicide injury.

grasses under these conditions are often less sensitive to herbicide activity. Delay application until the stress passes and weeds and crop resume growth.

Before making applications of Assure II to crops previously under stress, or injured from other pesticide applications, the crop needs to be fully recovered and growing vigorously.

Assure II is rainfast 1 hour after application.

APPLICATION INFORMATION

USE RESTRICTIONS

- Do not feed forage, hay, or straw from treated areas to livestock unless stated otherwise under the specific crop use directions.
- Do not apply Assure II through any type of irrigation equipment.
- Do not contaminate any body of water.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.

IMPORTANT PRECAUTIONS

Injury to or loss of desirable trees, vegetation, or adjacent sensitive crops may result from failure to observe the following:

- prevent drift of spray to desirable plants (refer to SPRAY DRIFT MANAGEMENT section of this label).
- Take all necessary precautions to avoid all direct or indirect contact (such as spray drift) with non-target plants or areas. Most grass crops, including wheat, barley, rye, oats, sorghum, rice, and corn are highly sensitive to Assure II.
- Carefully observe all sprayer cleanup instructions both prior to and after using this product, as spray tank residue may damage crops other than those included in the crop rotation section.

WEED RESISTANCE MANAGEMENT

Assure II herbicide, which contains the active ingredient quizalofop-p-ethyl, is a group 1 herbicide based on the mode of action classification system of the Weed Science Society of America. Quizalofop-p-ethyl is in the class of herbicides known as aryloxyphenoxypropionates (Fops) within the group 1 herbicides that inhibit the enzyme acetyl-CoA carboxylase (ACCase) in weeds. Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is a best practice. A diversified weed management program may include the use of multiple herbicides with different sites of action and overlapping weed spectrum with or without tillage operations and/or other cultural practices. Research has demonstrated that using the labeled rate and directions for use is important to delay the selection for resistance.

The continued effectiveness of this product depends on the successful implementation of a weed resistance management program.

To aid in the prevention of developing weeds resistant to this product, users should:

- Scout fields before application to ensure herbicides and rates will be appropriate for the weed species and weed sizes present.
- Start with a clean field, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small (less than 4 inches).
- Apply full rates of Dupont Assure II herbicide for the most difficult to control weeds in the field at the specified time (correct weed size) to minimize weed escapes.
- Scout fields after application to detect weed escapes or shifts in control of weed species.
- Control weed escapes before they reproduce by seed or proliferate vegetatively.
- Report any incidence of non-performance of this product against a particular weed to your Dupont representative, local retailer, or county extension agent.
- Contact your Dupont representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MoA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective sites of actions for each target weed.
- If resistance is suspected, treat weed escapes with an herbicide having a site of action other than group 1 and/or use nonchemical methods to remove escapes, as practical, with the goal of preventing further seed production.
- Suspected herbicide-resistant weeds may be identified by these indicators:
 - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
 - A spreading patch of non-controlled plants of a particular weed species; and
 - Surviving plants mixed with controlled individuals of the same species

Additionally, users should follow as many of the following herbicide resistance management practices as is practical:

- use a broad spectrum soil-applied herbicide with other sites of action as a foundation in a weed control program.
- utilize sequential applications of herbicides with alternative sites of action.
- rotate the use of this product with non-group 1 herbicides.
- Avoid making more than two applications of Assure II herbicide and any other group 1 herbicides within a single growing season unless mixed with an herbicide with a different site of action with an overlapping spectrum for the difficult-to-control weeds.
- Incorporate non-chemical weed control practices, such as mechanical cultivation, crop rotation, cover crops and weedfree crop seeds, as part of an integrated weed

control program.

- use good agronomic principles that enhance crop development and crop competitiveness.
- Thoroughly clean plant residues from equipment before leaving fields suspected to contain resistant weeds.
- Manage weeds in and around fields, during and after harvest to reduce weed seed production.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that 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 systems in your area.

Split Applications with Postemergence Broadleaf Herbicides

Applying Assure II immediately prior to or following an application of a postemergence broadleaf herbicide may reduce control of some grasses. For best results, follow these directions when making split applications:

- Apply postemergence broadleaf herbicides at least 24 hours after applying Assure II.
- Apply Assure II when grass begins to develop new leaves (generally 7 days after the postemergence broadleaf herbicide application) in fields treated with a postemergence broadleaf herbicide.

SPOT/SMALL AREA SPRAY INSTRUCTIONS

To spot treat small areas of annuals (i.e., volunteer corn) or perennials (i.e., rhizome johnsongrass)

- use a 0.375% v/v solution of Assure II and water.

Include a nonphytotoxic crop oil concentrate at 1 gallon per 100 gallons of spray solution (1% v/v) or a nonionic surfactant at 1 qt per 100 gallons of spray solution (0.25% v/v).

- Treat plants on a spray-to-wet basis to ensure good coverage.
- Do not treat >10% of the total treated area as spot/small area treatment. Do not exceed the maximum specified rate/acre/season for the crop that is going to be

planted when additional applications are made as spot treatment or small area treatment.

Cultivation

A timely cultivation may be necessary to control suppressed weeds, weeds that were beyond the maximum size at application, or weeds that emerge after an application of Assure II.

Cultivation up to 7 days before the postemergence application of Assure II may decrease weed control by pruning weed roots, placing the weeds under stress, or covering the weeds with soil and preventing coverage by Assure II. To allow Assure II to fully control treated weeds, wait at least 7 days after application to cultivate. Optimum timing for cultivation is 7 - 14 days after a postemergence application of Assure II.

CROP ROTATION

Do not rotate to crops other than Canola, Cotton, Crambe, Dry Beans (including Chickpea), Flax, Lentils, Mint (Spearmint and peppermint), peas (Dry and Succulent peas), Snap Beans, Soybeans, Sunflowers, Sugarbeets or Enlist field corn within 120 days after application.

APPLICATION EQUIPMENT

- See SPRAY DRIFT MANAGEMENT section for additional information and precautions.

GROUND APPLICATION

Broadcast Application

- When applying by ground, use spray nozzles that will deliver medium or larger spray droplets as defined in the American Society of Agricultural and Biological Engineers (ASABE) standard ANSI/ASAE S572.1 (March 2009). (See Spray Drift Management section for additional information).
- 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 in nonarid areas.
- use a minimum of 15 gal of water per acre in arid areas.
- Do not exceed 40 gal of water per acre.
- Increase spray volume and pressure as weed or crop density and size increase.

Band Application

- Because band application equipment sprays a narrower area than broadcast application equipment, calibrate equipment to use proportionately less spray solution.
- To avoid crop injury, carefully calibrate the band applicator not to exceed the labeled rate.
- Carefully follow the manufacturer's instructions for nozzle type, nozzle orientation, distance of the nozzles from the crop and weeds, spray volumes, calibration, and spray pressure.

Aerial Application

- When applying by air, use spray nozzles that will deliver coarse or larger spray droplets as defined in the American Society of Agricultural and Biological Engineers (ASABE) standard ANSI/ASAE S572.1 (March 2009). (See Spray Drift Management section for additional information).
- use nozzle types and arrangements that provide optimum spray distribution and maximum coverage.
- use a minimum of 3 gal of water per acre in nonarid areas.
- use a minimum of 5 gal of water per acre in arid areas.

AT THE END OF THE DAY

It is recommended that during periods when multiple loads of Assure II herbicide are applied, at the end of each day of spraying the interior of the tank be rinsed with fresh water and then partially filled, and the boom and hoses flushed. This will prevent the buildup of dried pesticide deposits which can accumulate in the application equipment.

After Spraying Assure II and Before Spraying Crops Other than those listed in the crop

Rotation Section

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of Assure II as follows:

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water. Loosen and physically remove any visible deposits.
2. Fill the tank with clean water and 1 gal of household ammonia* (contains 3% active) for every 100 gal of water. Flush the hoses, boom, and nozzles with the

cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.

3. remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.

4. repeat step 2.

5. rinse the tank, boom, and hoses with clean water.

6. If only Ammonia is used as a cleaner, the rinsate solution may be applied back to the crop(s) recommended on this label. Do not exceed the maximum labeled use rate. If other cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

*Equivalent amounts of an alternate-strength ammonia solution or a Dupont-approved cleaner can be used in the cleanout procedure. Carefully read and follow the individual cleaner instructions. Consult your Ag dealer, applicator, or Dupont representative for a listing of approved cleaners.

Notes:

1. Caution: Do not use chlorine bleach with ammonia as dangerous gases will form. Do not clean equipment in an enclosed area.

2. Steam-cleaning spray tanks is recommended prior to performing the above cleanout procedure to facilitate the removal of any caked deposits.

3. When Assure II is tank mixed with other pesticides, all cleanout procedures should be examined and the most rigorous procedure should be followed.

4. In addition to this cleanout procedure, all precleanout guidelines on subsequently applied products should be followed as per the individual labels.

5. Where routine spraying practices include shared equipment frequently being switched between applications of Assure II and applications of other pesticides to Assure II-sensitive crops during the same spray season, it is recommended that a sprayer be dedicated to Assure II to further reduce the chance of crop injury.

Shielded Sprayers

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are minimizing drift potential and not interfering with uniform deposition of the product.

Sensitive areas

Making applications when there is a sustained wind moving away from adjacent

sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is an effective way to minimize the effect of spray drift.

SPRAY DRIFT RESTRICTIONS

- Where states have more stringent regulations they must be observed.

AERIAL APPLICATIONS

- When applying by air, use spray nozzles that will deliver coarse or larger spray droplets as defined in the American Society of Agricultural and Biological Engineers (ASABE) standard ANSI/ASAE S572.1 (March 2009).
- The boom length must not exceed 75% of the wing span or 80% of the rotor blade diameter.
- Applications with wind speeds greater than 15 miles per hour are prohibited.
- Applications into temperature inversions are prohibited.
- Spray must be released at the lowest height consistent with pest control objectives and flight safety.
- Applicators must consider the effects of nozzle orientation and flight speed when determining droplet size spectrum.

GROUND APPLICATIONS

- When applying by ground, use spray nozzles that will deliver medium coarse or larger spray droplets as defined in the American Society of Agricultural and Biological Engineers (ASABE) standard ANSI/ASAE S572.1 (March 2009).
- Applications with wind speeds greater than 15 miles per hour are prohibited.
- Applications into temperature inversions are prohibited.
- Apply spray at the lowest height that is consistent with pest control objectives.

Limitations, Restrictions, and Exceptions

Dry Beans, Dry and Succulent Peas in ID, MT, OR and WA

Assure II herbicide can be tank mixed with "Basagran" herbicide for selective postemergence weed control of annual and perennial grasses and broadleaf weeds in dry beans, dry peas and succulent peas.

When tank mixing Assure II with "Basagran", annual grass antagonism can be minimized by increasing the specified use rate of Assure II by 2 ounces per acre. refer to the specific crop use directions and restrictions for maximum use rates. Assure II requires the use of a spray adjuvant (surfactant, crop oils, ect.). refer to the "Basagran" label for application information and restrictions. The most

restrictive provisions on either label will apply. Do not use the tank mix if any restrictions on the "Basagran" label conflict with instructions on the Assure II label. Do not tank mix Assure II and adjuvants with "Basagran" when temperatures exceed 80 degree F, as excessive leaf burn may occur.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Rates

[field_rates 0](#)

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Restricted Entry Interval

12 hours

Timings

[Postemergence \(Weed\)](#)