

## **SMALL GRAINS: BARLEY (FALL- AND SPRING-SEEDED) - PREHARVEST APPLICATIONS**

### General Information

#### PRODUCT INFORMATION

DuPont FeXapan herbicide Plus VaporGrip Technology is approved by U.S. EPA for all uses specified on this label in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas, Virginia, West Virginia, Wisconsin. Additional state restrictions and requirements may apply. The applicator must comply with any additional state requirements and restrictions.

This product is a water-soluble formulation intended for control and suppression of many annual, biennial, and perennial broadleaf weeds, as well as woody brush and vines listed in the WEEDS CONTROLLED section of this label. This product may be used for control of these weeds in corn, cotton, conservation reserve programs, fallow cropland, grass grown for seed, hay, proso millet, pasture, rangeland, general farmstead (noncropland), small grains, sorghum, soybean, and sugarcane, Cotton with XtendFlex Technology Roundup Ready 2 Xtend Soybean and XtendFlex Soybean.

DuPont FeXapan herbicide Plus VaporGrip Technology is a contact, systemic herbicide, which can have moderate residual control on small seeded broadleaf weeds, including waterhemp, lambsquarters and Palmer pigweed, depending on rainfall and soil type.

DuPont FeXapan herbicide Plus VaporGrip Technology is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. DuPont FeXapan herbicide Plus VaporGrip Technology interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

Failure to properly clean the entire spray system can result in inadvertent contamination of the spray system. You must ensure that the spray system used to apply this product is clean before using this product. Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product. Refer to the CROP-SPECIFIC INFORMATION and CROPS WITH XTEND TECHNOLOGY sections for application timing and other crop-specific details.

#### RESTRICTIONS

The applicator must read the entire label, including product labeling and follow all restrictions for DuPont FeXapan herbicide Plus VaporGrip Technology. Restrictions included, but are not limited to:

- DO NOT APPLY THIS PRODUCT AERIALY.
- DO NOT TANK MIX WITH PRODUCTS CONTAINING AMMONIUM SALTS SUCH AS AMMONIUM SULFATE (AMS) AND UREA AMMONIUM NITRATE. Small quantities of AMS can greatly increase the volatility potential of dicamba. Read the TANK MIXING instructions section of this label for instructions regarding other tank mix products.
- DO NOT APPLY TO CROPS UNDER STRESS DUE TO LACK OF MOISTURE, HAIL DAMAGE, FLOODING, HERBICIDE INJURY, MECHANICAL INJURY, INSECTS OR WIDELY FLUCTUATING TEMPERATURES AS INJURY MAY RESULT.
- DO NOT APPLY THROUGH ANY TYPE OF IRRIGATION EQUIPMENT. DO NOT TREAT IRRIGATION DITCHES OR WATER USED FOR CROP IRRIGATION OR DOMESTIC PURPOSES.
- DO NOT MAKE APPLICATION OF THIS PRODUCT IF RAIN THAT MAY EXCEED SOIL FIELD CAPACITY AND RESULT IN SOIL RUNOFF IS EXPECTED IN THE NEXT 24 HOURS.

Review the entire label including, specific crop use direction sections for additional restrictions

#### WEED RESISTANCE MANAGEMENT

Dicamba mimics auxin (a plant hormone) resulting in a hormone imbalance in

sensitive plants that interferes with normal cell division, cell enlargement, and protein synthesis. Dicamba active ingredient is a Group 4 herbicide based on the mode of action classification system of the Weed Science Society of America. Any weed population can contain plants naturally resistant to Group 4 herbicides. Weed species resistant to Group 4 herbicides can be effectively managed utilizing another herbicide from a different Group, or by using other cultural or mechanical practices.

### Weed Management Practices

Certain agronomic practices can delay or reduce the likelihood that resistant weed populations will develop and can be utilized to manage weed resistance once it occurs.

Do not use less than the labeled rate of this product in a single application. Using the appropriate application rate can minimize the selection for resistant 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:

- 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 FeXapan herbicide Plus VaporGrip Technology for the most difficult to control weed in the field at the specified time (correct weed size) to minimize weed escapes.
- Avoid tank mixtures with other herbicides that reduce the efficacy of this product (through antagonism), or with ones that encourage application rates of this product below those specified on this label.
- Scout fields after application to detect weed escapes or shifts in 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.
- If resistance is suspected, treat weed escapes with an herbicide having a site of action other than Group 4 and/or use non- chemical methods to remove escapes, as practical, with the goal of preventing further seed production. EPA defines suspected herbicide resistance as the situation where the following three indicators occur at a site or location:
  - 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 4 herbicides.
- Avoid making more than two applications of dicamba and any other Group 4 herbicides within a single growing season unless mixed with an herbicide with a different mechanism 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 weed- free 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.

Contact the local agricultural extension service, DuPont representative, agricultural retailer or crop consultant for further guidance on weed control practices as needed.

Management of Dicamba-Resistant Biotypes

Appropriate testing is critical in order to determine if a weed is resistant to dicamba. Contact your DuPont representative to determine if resistance in any particular weed biotype has been confirmed in your area, or visit on t h e Internet [www.weedscience.org](http://www.weedscience.org).

DuPont is not responsible for any losses that result from the failure of this product to control dicamba-resistant weed biotypes.

The following good agronomic practices can reduce the spread of confirmed dicamba-resistant biotypes:

- If a naturally occurring resistant biotype is present in your field, this product may be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g., crop rotation or tillage) can also be used as appropriate.
- Scout treated fields after herbicide application and control weed escapes, including resistant biotypes, before they set seed.
- Thoroughly clean equipment, as practical, for all weed seeds before leaving fields known to contain resistant biotypes.

#### 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.

#### Ground Application (Banding)

When applying DuPont FeXapan herbicide Plus VaporGrip Technology by banding, determine the amount of herbicide and water volume needed using the following formula:

#### Ground Application (Broadcast)

Water Volume: Use a minimum of 15 gallons of spray solution per broadcast acre for optimal performance. Use 20 gallons per acre when treating dense or tall

vegetation.

Application Equipment: Select nozzles (refer to the SPRAYER SETUP section of this label) designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as practical for good weed coverage.

Using a hooded sprayer or other drift reduction technology in combination with approved nozzles may further reduce drift potential.

#### Ground Application (Wipers)

DuPont FeXapan herbicide Plus VaporGrip Technology may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush and vines. Use a solution containing 1 part DuPont FeXapan herbicide Plus VaporGrip Technology to 1 part water. Do not apply greater than 1 lb dicamba acid equivalent (1 quart of this product) per acre per application. Do not contact desirable vegetation with herbicide solution. Wiper application may be made to crops (including pastures) and non-cropland areas described in this label with the exception of cotton, sorghum, and non-dicamba-tolerant soybean.

#### ADDITIONAL RESTRICTIONS

Maximum Application Rates: The maximum application or use rates stated throughout this label are given in units of volume (fluid ounces or quarts) of this product per acre. However, the maximum allowed application rates apply to this product combined with the use of any and all other herbicides containing the active ingredients dicamba, whether applied separately or as a tank mixture, on a basis of total pounds of dicamba (acid equivalents) per acre. If more than one dicamba-containing product is applied to the same site within the same year, you must ensure that the total use of dicamba (pounds acid equivalents) does not exceed 2 pounds/A per year from all applications. See the INGREDIENTS section of this label for necessary product information.

Maximum seasonal use rate: Refer to Table 2. Crop-Specific Restrictions for crop-specific maximum seasonal use rates. Do not exceed 88 fluid ounces of DuPont FeXapan herbicide Plus VaporGrip Technology (2 pounds acid equivalent) per acre, per year.

Preharvest Interval (PHI): Refer to the CROP-SPECIFIC INFORMATION section for preharvest intervals.

Restricted Entry Interval (REI): 24 hours

#### Crop Rotational Restrictions

No rotational cropping restrictions apply when rotating to Roundup Ready 2 Xtend Soybeans, XtendFlex Soybeans, or cotton seed with XtendFlex Technology (including Bollgard 3 XtendFlex Cotton, Bollgard II XtendFlex Cotton, or XtendFlex Cotton). For other crops the interval between application and planting rotational crop is given below. When counting days from the application of this product, do not count days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

Planting/replanting restrictions at application rates of 33 fluid ounces of this product per acre per season or less: Follow the planting restrictions in the directions for use for Preplant application in the Crop Specific Information section of this label. For corn, cotton (except cotton seed with XtendFlex Technology), sorghum, and soybean (except Roundup Ready 2 Xtend Soybean and XtendFlex Soybean), follow the planting restrictions in the directions for use for preplant application in the Crop-Specific Information section of this label. Do not plant barley, oat, wheat, and other grass seedings for 15 days for every 11 fluid ounces of this product applied per acre east of the Mississippi River and 22 days for every 11 fluid ounces per acre applied west of the Mississippi River. No planting restrictions apply beyond 120 days after application of this product. Planting/replanting restrictions at application rates of more than 33 fluid ounces and up to 88 fluid ounces of this product per acre per season: Wait a minimum of 120 days after application of this product before planting corn, sorghum and cotton (except cotton seed with XtendFlex Technology) east of the Rocky Mountains and before planting all other crops (except Roundup Ready 2 Xtend Soybean Xtendflex Soybean) grown in areas receiving 30 inches or more rainfall annually. Wait a minimum of 180 days before planting crops in areas with less than 30 inches of annual rainfall. Wait a minimum of 30 days for every 22 fluid ounces of this product applied per acre before planting barley, oat, wheat, and other grass seedings east of the Mississippi River and 45 days for every 22 fluid ounces of this product applied per acre west of the Mississippi River.

## Limitations, Restrictions, and Exceptions

### SMALL GRAINS: BARLEY (FALL- AND SPRING-SEEDED)

#### Preharvest applications:

DuPont FeXapan herbicide Plus VaporGrip Technology can be used to control weeds that may interfere with harvest of fall and spring-seeded barley. Apply 11 fluid ounces of DuPont FeXapan herbicide Plus VaporGrip Technology per acre as a broadcast or spot treatment to annual broadleaf weeds when barley is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing, but before weeds canopy.

Allow a minimum of 7 days between treatment and harvest. Do not use preharvest-treated barley for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

#### Rates

[field rates 0](#)

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#### Restricted Entry Interval

24 hours

#### Timings

[Preharvest](#)