CORN - REDUCED AND NO-TILL SYSTEMS OR CONVENTIONAL TILLAGE SYSTEMS - COARSE

General Information

PRODUCT INFORMATION

For use only on field corn, production seed corn, silage corn, sweet corn, popcorn, Miscanthus or other non-food perennial bioenergy crops. Corn in this label refers to: field corn, production seed corn, silage corn, sweet corn and popcorn.

DuPont BREAKFREE NXT LITE may be applied to the surface or incorporated into the top 1-2 inch layer of soil. It may be used for control alone, or in tank mix combinations, for the weeds listed in the "Target Weeds" section of these use directions. BREAKFREE NXT LITE controls weeds by interfering with normal germination and seedling development.

BREAKFREE NXT LITE does not control emerged weeds present at application.

Restrictions

- Not for Sale, Sale Into, Distribution and/or Use in Nassau and Suffolk Counties of New York State.

- Do not use BREAKFREE NXT LITE on any crop other than field corn, production seed corn, silage corn, popcorn, and Miscanthus or other non-food perennial bioenergy crops.

- Do not apply BREAKFREE NXT LITE before pre-irrigation in irrigated areas.

- Do not allow BREAKFREE NXT LITE to contaminate feed or food.

- Do not contaminate irrigation water used for crops other than corn or water used for domestic purposes.

- On the following soil types, do not apply this product within 50 feet of any well where the depth to groundwater is 30 feet or less: sands with less than 3% organic matter; loamy sands with less than 2% organic matter; or sandy loams with less than 1% organic matter. See the figure for additional clarification.

- Do not apply DuPont BREAKFREE NXT LITE postemergence to sweet corn.

- Chemigation: Do not apply this product through any type of irrigation system unless otherwise directed by approved supplemental labeling in possession of the user at the time of application.

- Do not use flood irrigation to apply or incorporate this product.

- Product must be used in a manner that will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

- Do not apply under conditions that favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

- Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

- Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered soils.

- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least ½ inch of rainfall has occurred between application and the first irrigation.

- Aerial Application: Do not apply this product using aerial application equipment unless otherwise directed by approved supplemental labeling in possession of the user at the time of application.

- Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:

- Use low-pressure application equipment capable of producing a large droplet spray.

- Do not use nozzles that produce a fine droplet spray.

- Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.

- Keep ground-driven spray boom as low as possible above the target surface.

- Make application when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when gusts approach 15 mph.

- Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

- Flush sprayer with clean water after use.

- Maximum Atrazine Application Rates Per Calendar Year:

Maximum annual atrazine broadcast application rates for corn must be as follows:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2.0 pounds active ingredient (contained in 4.7 quarts BREAKFREE NXT LITE; however do not apply more than 2.7 quarts BREAKFREE NXT LITE, per maximum acetochlor rate restrictions below) per acre. If postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds active ingredient per acre per calendar year.

Note: One quart per acre BREAKFREE NXT LITE delivers 0.425 pound active ingredient atrazine per acre.

- Apply a maximum of 2.0 pounds active ingredient (contained in 4.7 quarts BREAKFREE NXT LITE; however do not apply more than 2.7 quarts BREAKFREE NXT LITE, per maximum acetochlor rate restrictions below)per acre if a single preemergence application is made on soils that are not highly erodible or on highly erodible soil if at least 30% of the soil is covered with plant residues, or

- Apply a maximum of 1.6 pounds active ingredient (contained in 3.7 quarts BREAKFREE NXT LITE; however do not apply more than 2.7 quarts BREAKFREE NXT LITE, per maximum acetochlor rate restrictions below) per acre as a single preemergence application on highly erodible soils if less than 30% of the soil is covered with plant residues; or 2.0 pounds active ingredient ingredient (contained in 4.7 quarts BREAKFREE NXT LITE; however do not apply more than 2.7 quarts BREAKFREE NXT LITE, per maximum acetochlor rate restrictions below) per acre if only applied postemergence.

- Maximum Acetochlor Application Rates Per Calendar Year: Maximum annual acetochlor broadcast application rates for corn must not exceed 3.0 pounds active ingredient (2.7 quarts BREAKFREE NXT LITE) per acre. Note: One quart per acre BREAKFREE NXT LITE delivers 1.075 pound active ingredient acetochlor per acre.

- Preharvest Interval: Do not apply DuPont BREAKFREE NXT LITE within 60 days of harvest for field corn forage uses or 45 days for sweet corn forage uses.

- Postemergence applications of BREAKFREE NXT LITE to corn must be made before the crop reaches 11 inches in height.

Precautions

- Failure to strictly follow label directions may result in exceeding the maximum annual atrazine use rates as stipulated by the Environmental Protection Agency.

- Note: This product contains atrazine and thus may not control weeds that are known or suspected to be triazine resistant.

Following many years of continuous use of atrazine and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by atrazine and related herbicides. Where this is known or suspected and weeds controlled by atrazine are expected to be present along with resistant biotypes, it is recommended that atrazine be used in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide.

- BREAKFREE NXT LITE should not be used on corn seed stock such as Breeders, Foundation, or Increase.

- BREAKFREE NXT LITE should not be stored near seeds, fertilizers, or foodstuffs.

- All containers of BREAKFREE NXT LITE should be kept tightly closed when not in use.

- Applied according to directions and under normal growing conditions, BREAKFREE NXT LITE will not harm the treated crop. During germination and early stages of growth, extended periods of unusually cold and wet or hot and dry weather, insect or plant disease attack, carryover pesticide residues, the use of certain soil applied systemic insecticides, improperly placed fertilizers or soil insecticides may create abnormal conditions that weaken crop seedlings.

BREAKFREE NXT LITE used under these abnormal conditions could result in crop injury.

Weed Resistance Management Guidelines

Acetochlor and atrazine, the active ingredients in this product, are Group 15 and Group 5 herbicides, respectively, based on the mode of action classification system of the Weed Science Society of America. Any weed population may contain plants naturally resistant to Group 15 or Group 5 herbicides. Such resistant weed plants may not be effectively managed using Group 15 or Group 5 herbicides but may be effectively managed utilizing another herbicide alone or in mixtures from a different Group and/or by using cultural or mechanical practices. However, any herbicide mode of action classification by itself may not adequately address specific weeds that are resistant to specific herbicides. Consult your DuPont Crop Protection representative, state cooperative extension service, professional consultants, or other qualified authorities to determine appropriate actions for treating specific resistant weeds.

Best Management Practices

Proactively implementing diversified weed control strategies to minimize selection for weed populations resistant to one or more herbicides is recommended. A diversified weed management program may include the use of multiple herbicides with different modes of action and overlapping weed spectrum with or without

tillage operations and/or other cultural practices. Research has demonstrated that using full labeled rates and following directions for use is important to delay the selection for resistance. Scouting after a herbicide application is important because it can facilitate the early identification ways to contain resistant populations is to implement measures to avoid allowing weeds to reproduce by seed or to proliferate vegetatively. Cleaning equipment between sites and avoiding movement of plant material between sites will greatly aid in retarding the spread of resistant weed seed.

General principles of herbicide resistance management:

1. Apply integrated weed management practices. Use multiple herbicide modes-of-action with overlapping weed spectrums in rotation, sequences, or mixtures.

2. Use the full specified herbicide rate and proper application timing for the hardest to control weed species present in the field.
3. Scout fields after herbicide application to ensure control has been achieved. Avoid allowing weeds to reproduce by seed or to proliferate vegetatively.

4. Monitor site and clean equipment between sites.

For annual cropping situations also consider the following:

- Start with a clean field and control weeds early by using a burndown herbicide treatment or tillage in combination with a soil-applied residual herbicide as appropriate.

- Use cultural practices such as cultivation and crop rotation, where appropriate.

- Use good agronomic principles that enhance crop competitiveness.

- Use new commercial seed that is as free of weed seed as possible.

Report any incidence of repeated non-performance of this product on a particular weed to your DuPont Crop Protection representative, local retailer, or county extension agent.

Application Directions - Corn

Carriers

Liquids: Either water or liquid fertilizers such as solutions, slurries or suspensions may be used as liquid carriers. If fluid fertilizers are used, a physical compatibility test with these must be done before combining in the spray tank. Even if DuPont BREAKFREE NXT LITE is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

Dry Bulk Fertilizer: BREAKFREE NXT LITE may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread.

Volume

Liquid: Use a minimum of 10 gallons per acre in broadcast boom equipment for ground applications.
Dry Bulk Fertilizer: Use a minimum of 200 pounds of dry bulk fertilizer per acre.

Application Timing and Methods

For the optimum period of effective weed control during the time most critical to corn production, preplant applications of DuPont BREAKFREE NXT LITE should occur as close as possible to planting. Preemergence applications should occur as close as possible to planting, but prior to weed emergence; this product will not control emerged weeds present at application.

Early Preplant Surface: On medium and fine textured soils (Table 1), BREAKFREE NXT LITE may be applied up to 45 days prior to planting planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the specified broadcast rate applied initially and the remaining 40 percent applied at planting.

Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are present at the time of application, apply this product in a tank mixture with an appropriate contact herbicide. Observe directions for use, precautions, and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

Preplant Incorporation: BREAKFREE NXT LITE and certain tank mixes may be mechanically incorporated in the top 2 inches of the soil with field cultivators, discs, or spring tooth harrows at any time within 14 days prior to planting.

Improper incorporation, excessive crop residues, or poor soil tilth may result in erratic, streaked or otherwise unsatisfactory weed control. Do not mix BREAKFREE NXT LITE deeper than 2 inches into the soil and avoid moving or shaping soil after incorporation, as weed control may be reduced.

Preemergence Surface: BREAKFREE NXT LITE and certain tank mixes may be applied to the soil surface as a broadcast or banded application. Precipitation or sprinkler irrigation of at least 0.25 inch is required to bring BREAKFREE NXT LITE into contact with germinating seeds. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe, or similar device, to incorporate the herbicide. The device used should be run at a shallow depth to prevent disturbing the corn seed. Do not remove BREAKFREE NXT LITE from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Postplant-Preemergence: BREAKFREE NXT LITE may be applied immediately after planting but prior to corn emergence. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe, or similar device, to shallowly incorporate the herbicide. The device used should be run at a shallow depth to prevent disturbing the corn seed. Do not remove BREAKFREE NXT LITE from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Banding-Preemergence: BREAKFREE NXT LITE may be applied in a 10 to 14 inch band after corn planting but prior to corn emergence. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe or similar device to incorporate the herbicide. The device used should be run at a shallow depth to prevent disturbing the corn seed. Do not remove BREAKFREE NXT LITE from the weed control zone or dilute it with untreated soil. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

Early Postemergence: BREAKFREE NXT LITE may be applied early postemergence to corn up to 11" tall.

Applications must be made prior to weed seedling emergence or in a tank mixture with a herbicide that controls the emerged weeds. Read and follow restrictions and directions on tank mix product labels.

Note: Do not make postemergence applications using sprayable liquid fertilizer as the carrier because severe crop injury may occur.

Note: Do not apply BREAKFREE NXT LITE postemergence to sweet corn.

Sprinkler Irrigation: Do not apply BREAKFREE NXT LITE through sprinkler irrigation systems unless otherwise directed by approved supplemental labeling in possession of the user at the time of application. A sprinkler system may be used to incorporate BREAKFREE NXT LITE after application. After BREAKFREE NXT LITE has been applied, a sprinkler irrigation system set to deliver 0.25 to 0.75 inch of water per acre may be used to incorporate the product. Using more than 0.75 inch of water could result in reduced performance. On sandy soils low in organic matter, use no more than 0.5 inch of water. Do not use flood irrigation to apply or incorporate BREAKFREE NXT LITE.

Planting

Planting should be done as close to the time of application of DuPont BREAKFREE NXT LITE as possible. This allows BREAKFREE NXT LITE to provide effective weed control during the time it is most critical in the production of corn.

Cultivation
Cultivation should be delayed as long as possible. If weeds emerge, a shallow

cultivation or rotary hoeing will generally result in improved weed control. If BREAKFREE NXT LITE was incorporated, cultivate to a depth of less than half the depth of incorporation.

If cultivation is necessary due to soil crusting, compaction, or escaped weeds, adjust equipment to run shallow and minimize soil movement. This will decrease the possibility of diluting or moving the herbicide from the weed control zone.

Soil Texture and Organic Matter

The use rate of BREAKFREE NXT LITE is determined by soil texture which must be determined prior to application.

Weeds Controlled

BREAKFREE NXT LITE applied as directed in this label will control or partially control the weeds listed in Table 4. Additional weeds may be controlled with tank mixes. See the "Tank Mix Combinations" section of this label for tank mix directions. Always consult the tank mix product labels for specific use rates and directions. Always follow the most restrictive label when tank mixing BREAKFREE NXT LITE with another product. BREAKFREE NXT LITE may be tank mixed with any other registered corn product as long as compatibility is verified and it is not prohibited by the label of the tank mix product. Note: This product contains atrazine and thus may not control weeds that are known or suspected to be triazine resistant.

Cupgrass, woolly: Apply 2.7 quarts of BREAKFREE NXT LITE per acre to control this weed. Control can be erratic, especially under dry conditions. Control escaped weeds with cultivation or application of an appropriate registered postemergence herbicide.

Nutsedge yellow: Preplant incorporate for improved control.

Nutsedge yellow, Cocklebur, Morningglory, Velvetleaf: Use the higher rate in the specified application rate range. Activity may be reduced under dry conditions or following early (more than 14 days) preplant applications. Additional atrazine and/or sequential herbicides may be needed for complete control.

Panicum Texas, Signalgrass broadleaf: Best control is achieved when BREAKFREE NXT LITE is applied within 5 days of planting and rainfall occurs shortly after application or mechanical incorporation is used to activate the herbicide. If rainfall

does not occur within 7 days after application, shallow cultivation will enhance activity. Excessive rainfall after application may reduce control. Under adverse weather conditions and/or heavy infestations, a cultivation or follow-up herbicide may be needed.

Limitations, Restrictions, and Exceptions

Reduced Tillage Systems or Early Preplant Applications in Conventional Tillage

BREAKFREE NXT LITE may be used in reduced and no-till systems and in early preplant applications in conventional tillage systems. Single applications may be made up to 30 days prior to planting or after planting but before crop emergence. Optimal weed control will be obtained when applications are made as close to planting as possible but before crop emergence. If weeds are emerged at time of application, apply a labeled burndown herbicide such as DuPont ABUNDIT Extra (glyphosate), paraquat or 2,4-D with BREAKFREE NXT LITE.

Reduced and No-till Systems or Conventional Tillage Systems when Applications are made more than 14 days Prior to Planting

- In areas of heavy weed infestation, use up to 2.7 quarts per acre on medium- and fine-textured soils. Rates are for single applications. Split applications may be used; apply 60% of the specified rate up to 45 days before planting and the remaining 40% at or immediately following planting but before crop emergence.

- Do not apply more than 14 days prior to planting on coarse textured soils.

Method
Surface
Soil incorporation
Pre-Harvest Interval

Field Corn Forage: 60 days
Sweet Corn Forage: 45 days

Rates
field_rates 0

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Restricted Entry Interval

12 hours
Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Soils
Coarse
Loamy Sand
Sandy Loam
Sand
Tillages
Conventional
Fallow/Reduced
No-Tillage
Timings
Early Preplant (more than 14 days prior to planting).