

## **CORN - CONVENTIONAL TILLAGE SYSTEM - GREATER THAN 7% ORGANIC MATTER - MEDIUM**

### General Information

#### GENERAL INFORMATION

DuPont BREAKFREE herbicide is intended for preplant, preemergence, or early postemergence use in corn. Use of this product in corn is limited to field corn, production seed corn, silage corn, and popcorn. Do not apply this product to any crop other than corn.

BREAKFREE is a unique combination of the herbicide acetochlor and the antidote or safener dichlormid. While the acetochlor provides weed control, the dichlormid safens corn against herbicide injury. BREAKFREE may be applied to the surface or incorporated into the top 1 to 2 inch layer of soil. It is recommended for control alone, or in tank mix combinations as indicated, for the weeds listed in the Target Weeds section of these use directions.

BREAKFREE controls weeds by interfering with normal germination and seedling development. BREAKFREE will not control established or germinated weeds present at application.

#### General Use Precautions and Restrictions

- Do not apply to the following soils if groundwater depth is 30 feet or less: sand with less than 3% organic matter; loamy sand with less than 2% organic matter; or sandy loam with less than 1% organic matter.
- Do not apply this product using aerial application equipment.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not use flood irrigation to apply or incorporate this product.
- Maximum Application Rate: The maximum application rate for BREAKFREE on corn is 3.75 pints (3 lb of acetochlor active ingredient) per acre per year.
- This product may not be mixed or loaded within 50 feet of any wells including

abandoned wells and drainage wells, sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

- Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

- 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 must 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 1/2 inch of rainfall has occurred between application and the first irrigation.

- Do not apply when wind conditions favor drift to nontarget 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 ontarget 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.
- Do not apply more than 3 3/4 pints of DuPont BREAKFREE per acre per season.

#### Application Timing and Methods

For the optimum period of effective weed control during the time most critical to corn production, preplant application of BREAKFREE herbicide should occur as close as possible to planting. Preemergence applications should occur as close as possible to planting, but prior to weed emergence. Postemergence applications should occur prior to weed emergence or in tank mix combination with a product that controls emerged weeds.

Early Preplant: BREAKFREE and certain tank mixtures may be applied up to 30 days before planting.

Preplant Incorporation: BREAKFREE and certain tank mixes may be mechanically incorporated into the top 2 inches of the soil by mechanical means such as field cultivators, discs, or spring tooth harrows any time up to 14 days before planting. Improper incorporation, excessive crop residues, or poor soil tilth may result in

erratic, streaked, or otherwise unsatisfactory weed control. Do not mix BREAKFREE deeper than 2 inches into the soil and avoid moving or shaping soil after incorporation.

**Preemergence Surface:** BREAKFREE 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 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 equipment to incorporate the herbicide.

Incorporation equipment should be run at a shallow depth to avoid disturbance of germinating corn seed. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped after incorporation.

**Postplant-Preemergence:** BREAKFREE may be applied 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 equipment to shallowly incorporate the herbicide. Incorporation equipment should be run at a shallow depth to prevent disturbance of the germinating corn. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

**Banding-Preemergence:** BREAKFREE may be applied in a 10- to 14-inch band after corn planting but prior to emergence. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by shallow incorporation using a rotary hoe or similar equipment. Do not disturb the germinating corn seed. Erratic weed control resulting from exposure of untreated soil may occur if surface soil is moved or reshaped during incorporation.

**Early Postemergence:** BREAKFREE may be applied early postemergence to corn up to 11 inches tall. Application must be made prior to weed seedling emergence or in a tank mixture that controls the emerged weeds. Read and follow restrictions and directions on tank mix product labels.

**Sprinkler Irrigation:** Do not apply BREAKFREE by sprinkler irrigation. Use a sprinkler system only to incorporate BREAKFREE after application. After BREAKFREE 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 soil low in organic matter, use no more than 0.5 inch of water. Do not use flood irrigation to apply or incorporate BREAKFREE.

Fall Application - For use in IA; IL (North of Route 136); NE (North of Route 20); MN; ND; SD; WI:

Following soybean harvest, apply to soybean stubble after October 15, when the sustained soil temperature at 4-inch depth is less than 50°F, but before ground freezes. Use on medium and fine textured soils with greater than 2.5% organic matter. Only corn may be planted the following spring.

Ground may be tilled before or after application. Do not exceed 2-inch incorporation depth if tilled after application. If a spring application is made, the total rate of the fall plus spring application must not exceed the maximum labeled rate for corn grown on that soil.

#### Cultivation

Cultivation should be delayed as long as possible. If weeds develop, a shallow cultivation or rotary hoeing will generally result in improved weed control. If DuPont BREAKFREE was incorporated, cultivate to a depth of less than half the depth of incorporation.

If cultivation is necessary due to soil crusting or compaction, 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.

#### Limitations, Restrictions, and Exceptions

#### CORN

##### Conventional Tillage Systems

Rate Ranges: If the weed infestation is light and/or organic matter is in the lower end of the range, use a rate at the lower end of the rate range for the soil texture and organic matter content. If the weed infestation is heavier and/or organic matter is in the upper end of the range, use the higher rates in the rate range for the soil texture and organic matter.

Yellow nutsedge requires a minimum of 2.5 pints. Incorporation will improve control.

Light to moderate infestations will be controlled. Heavy infestations may require a tank mixture or sequential herbicide.

Best control is achieved when BREAKFREE is applied within 5 days of planting and rainfall occurs shortly after application or mechanical incorporation is used to activate the herbicide. If it does not rain within 7 days, 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.

#### Method

[Broadcast/Foliar Ground](#)

[Band application](#)

[Broadcast/Foliar Ground](#)

[Band application](#)

[Broadcast/Foliar Ground](#)

[Band application](#)

#### Rates

[field rates 0](#)

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#### Restricted Entry Interval

12 hours

#### Soils

[Medium](#)

[Loam](#)

[Silt Loam](#)

[Silt](#)

[Sandy Clay Loam](#)

#### Tillages

[Conventional](#)

#### Timings

[Preemergence \(Crop\)](#)

[Preplant Incorporated](#)

[Early Postemergence](#)