

# **PREPLANT AND PREEMERGENCE APPLICATION IN NO TILLAGE CORN - COARSE, MEDIUM OR FINE-TEXTURED SOILS**

## General Information

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Detonate herbicide 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 Table 1. General Weed List, Including ALS- and Triazine-Resistant Biotypes. Detonate may be used for control of these weeds in asparagus, corn, cotton, conservation reserve programs, fallow cropland, grass grown for seed, hay, proso millet, pasture, rangeland, general farmstead (noncropland), small grains, sorghum, soybean, sugarcane, and turf.

## Mode of Action

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

## Resistance Management

Detonate has a low probability of selecting for resistant weed biotypes.

## Application Instructions

Detonate can be applied to actively growing weeds as aerial, broadcast, band, or spot spray applications using water or sprayable fertilizer as a carrier. For general Detonate application rates for control or suppression by weed type and growth stage see Table 2. General Detonate Application Rates for Control or Suppression by Weed Type and Growth Stage. For crop-specific application timing and other details, refer to section VI. Crop-Specific Information.

To avoid uneven spray coverage, Detonate should not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid off-target movement. Use extreme care when applying Detonate to prevent injury to desirable plants and shrubs.

### Cultivation

DO NOT cultivate within 7 days after applying Detonate.

### Sensitive Crop Precautions

Detonate may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems, or foliage. These plants are most sensitive to Detonate during their development or growing stage.

### Aerial Application Methods and Equipment

**Water Volume:** Use 1 to 10 gallons of water per acre (2 to 20 gallons of diluted spray per treated acre for preharvest uses). Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Make aerial applications at the lowest safe height to reduce exposing the spray to evaporation and wind.

The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in the labeling, as well as state and local regulations and ordinances.

DO NOT use aerial equipment if spray particles can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

### Ground Application (Banding)

When applying Detonate by banding, determine the amount of herbicide and water volume needed using the formula (Refer to the label under this section).

### Ground Application (Broadcast)

**Water Volume:** Use 3 to 50 gallons of spray solution per broadcast acre for optimal

performance. Use the higher spray volume when treating dense or tall vegetation.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

#### Ground Application (Wipers)

Detonate may be applied through wiper application equipment to control or suppress actively growing broadleaf weeds, brush, and vines. Use a solution containing 1 part Detonate to 1 part water. DO NOT contact desirable vegetation with herbicide solution. Wiper application may be made to crops (including pastures) and non-cropland areas described in the label with the exception of cotton, sorghum, and soybean.

#### Restrictions and Limitations

- Maximum seasonal use rate: Refer to Table 4. Crop-Specific Restrictions and Limitations for crop-specific maximum seasonal use rates. DO NOT exceed 64 fluid ounces of Detonate (2 pounds acid equivalent) per acre, per year.
- Preharvest Interval (PHI): Refer to section VI. Crop-Specific Information for preharvest intervals.
- Crop Rotational Restrictions:

The interval between application and planting rotational crop is given below. Always exclude counting 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 for Detonate applications of 24 fluid ounces per acre or less: No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in the label including corn, cotton, sorghum, and soybean, follow the preplant use directions in section VI. Crop-Specific Information. For barley, oat, wheat, and other grass seedings, the interval between application and planting is 15 days per 8 fluid ounces per acre applied east of the Mississippi River and 22 days per 8 fluid ounces per acre west of the Mississippi River.

Planting/replanting restrictions for applications of more than 24 fluid ounces and up to 64 fluid ounces of Detonate per acre: Corn, sorghum, cotton (east of the Rocky Mountains) and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat, and other grass seedings, may be planted if the interval from application to planting is 30 days per 16 fluid ounces per acre east of the Mississippi River and 45 days per 16 fluid ounces per acre west of the Mississippi River. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

- Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of Detonate.

- Stress: 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.

Refer to the label regarding tank mix information.

#### Limitations, Restrictions, and Exceptions

##### Corn (Field, Pop, Seed, and Silage)

Direct contact of Detonate with corn seed must be avoided. If corn seeds are less than 1.5" below the soil surface, delay application until corn has emerged.

Applications of Detonate to corn during periods of rapid growth may result in

temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after corn is growing normally to avoid breakage.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity. Up to 2 applications of Detonate may be made during a growing season. Sequential applications must be separated by 2 weeks or more.

DO NOT apply Detonate to seed corn or popcorn without first verifying with your local seed corn company (supplier) the selectivity of Detonate on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

Avoid using crop oil concentrates after crop emergence as crop injury may result. Use crop oil concentrates only in dry conditions when corn is less than 5" tall and when applying Detonate alone or tank mixed with atrazine.

Use of sprayable fluid fertilizer as the carrier is not recommended for applications of Detonate made after corn emergence.

Detonate is not registered for use on sweet corn.

#### PREPLANT AND PREEMERGENCE APPLICATION IN NO TILLAGE CORN:

Rates: Use 8 fluid ounces of Detonate per acre on coarse soils (sand, loamy sand, and sandy loam) or medium- and fine-textured soils with less than 2.5% organic matter.

Timing: Detonate can be applied to emerged weeds before, during, or after planting a corn crop. When planting into a legume sod (e.g. alfalfa or clover), apply Detonate after 4 to 6" of regrowth has occurred.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

[Band](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

[Band](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

[Band](#)

Rates

[field\\_rates 0](#)

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Restricted Entry Interval

24 hours

Soils

[Coarse](#)

[Loamy Sand](#)

[Sandy Loam](#)

[Medium](#)

[Fine](#)

[Sand](#)

Tillages

[No-Tillage](#)

Timings

[At-Plant](#)

[Preplant](#)

[Postplant](#)