

# **COTTON (PREPLANT ONLY)**

## General Information

### PRODUCT INFORMATION

This product is a selective postemergence herbicide for controlling a wide spectrum of annual, biennial, and perennial broadleaf weeds and brush in grass forages and selected row crops.

### Mode of Action

This product contains two active ingredients: dicamba and 2,4-D. This herbicide is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. This product interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds.

### Cleaning Spray Equipment

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's direction and then triple rinsing the equipment before and after applying this product.

### APPLICATION PROCEDURES

Apply this product at the rates and growth stages listed in Tables 1 and 2 as follows unless instructed differently by Section VI or VII. (Food/Feed Crop Specific Information or Non-Food/Feed Use Specific Information). Applications can be made to actively growing weeds as aerial, broadcast, band, or spot spray applications. This product may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in preplant or pre-emergence uses for all crops listed on this label. Postemergence uses with sprayable fluid fertilizer may be made on pasture, hayland, or wheat crops only.

The most effective application rate and timing varies based on the target weed species (refer to Table 1). In mixed populations of weeds the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size stated and will prevent adequate control.

## IRRIGATION

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

## SPRAY COVERAGE

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

## SPRAY DRIFT MANAGEMENT

### Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

### Sensitive Crop Precautions

This product 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 this product during their development or growing stage.

Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of this product herbicide with the roots of desirable plants such as trees and shrubs.

- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of nearby sensitive crops or if temperature inversion exists. However, always make applications when there is some air movement to determine the direction and distance of possible spray drift. Leave adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays. Drift-reducing additives approved for that use may be used.
- Do not use aerial equipment or apply this product when sensitive crops and plants are growing in the vicinity of area to be treated.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

#### Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

#### Application Equipment

Select nozzles designed to produce minimal amounts of fine spray particles. Make

applications at the lowest safe height to reduce the exposure of spray droplets to evaporation and wind. The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling as well as applicable 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.

#### AERIAL APPLICATION METHODS AND EQUIPMENT

Water Volume: Use 3 to 10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

#### GROUND APPLICATION (BANDING)

When applying this product by banding, determine the amount of herbicide and water volume needed using the formula given in the label.

#### GROUND APPLICATION (BROADCAST)

Water Volume: Use 5 – 40 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.

#### SPOT OR SMALL AREA APPLICATION

This product may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack or other small capacity sprayers, prepare a solution of this product in water according to Table 3 (assuming that the spot treatment rate equates to 60 gallons per acre on the broadcast basis). Adding a surfactant (0.5% by volume) can help improve control. For example, 5 gallons (40 pints or 640 fluid ounces) of herbicide solution would require 0.2 pints (3.2 fluid ounces) of surfactant.

Do not make spot treatments in addition to broadcast or band treatments.

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.

#### ADDITIVES

To improve burndown of emerged weeds, surfactants and/or low use rate of liquid

fertilizers (28-0-0,32-0-0), or crop oil concentrate may be used with this product or tank mixes with this product applied after the weeds have emerged. Crop oil concentrate is for non-food/feed crop uses only. Do not apply tank mixes that include Ammonium Sulfate or Crop Oil Concentrate postemergence to any food/feed crop use listed on this label. For food/feed crop uses, do not use liquid fertilizers that contain Ammonium Sulfate (AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances. Consult your local Nufarm representative for recommendations for your area. For additional information, see Compatibility Test for Mix Components in Section IV.

#### OIL CONCENTRATE

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be nonphytotoxic, contain only EPA-exempt ingredients,
- provide good mixing quality in the jar test, and
- be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see Compatibility Test for Mix Components in Section IV.

Adjuvants containing crop oil concentrates may be used for preplant, pre-emergence and between cropping applications. Do not use crop oil concentrate for postemergence applications in food/feed crops (i.e., sorghum, grass [hay or silage], pastures, rangeland, sugarcane and wheat).

#### Nitrogen Source

Sprayable liquid fertilizers: Use one quart of sprayable liquid fertilizers (28-0-0, 32-0-0) per acre. Do not use brass or aluminum nozzles when spraying fertilizers.

#### Nonionic Surfactant

The standard label recommendation is 2 - 4 pints of an 80% active nonionic spray surfactant per 100 gallons of water. For certain weeds, use a higher spray surfactant rate.

## RESTRICTIONS AND LIMITATIONS

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 BurnMaster for applications of 6 pints per acre or less: No rotational cropping restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including sorghum, follow the preplant use directions in Section VI. Food/Feed Crop-Specific Information. For barley, oat, wheat, and other grass seedings (including rice), the interval between application and planting is 10 days per pint per acre.

- Planting/replanting restrictions for applications of more than 6 pints and up to 8 pints of this product per acre:

Corn, soybean, 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 (including rice), may be planted if the interval from application to planting is 10 days per pint per acre east of the Mississippi River and 15 days per pint 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 this product.

- Stress: Do not apply to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result.

- Do not apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.

- Do not apply through any type of irrigation equipment. Do not contaminate irrigation ditches or water used for domestic purposes.

- This product cannot be used to formulate or reformulate any other pesticide product.

Limitations, Restrictions, and Exceptions

## COTTON (PREPLANT ONLY)

Minimum Waiting Interval Before Planting Cotton: 30 Days

### Directions

Apply to control actively growing emerged broadleaf weeds prior to planting cotton. For best performance, apply when weeds are in the 2- to 4-leaf stage and rosettes are less than 2" across.

### Cotton Restrictions:

- For use only preplant to cotton.
- Following application, a minimum accumulation of 1" rainfall or overhead irrigation, followed by the specified minimum waiting interval, is required before planting cotton.
- Do not apply more than 2.0 pints of this product per application per acre in one season prior to planting cotton.
- Do not apply more than 2 applications per year.
- Do not apply this product prior to planting cotton if you are not prepared to accept the results of cotton injury including possible loss of stand and yield.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D and dicamba pre-plant use.
- Mowing or cultivating weeds prior to treatment with this product may result in poor weed control.
- Do not apply this product pre-plant to cotton in fields having a coarse-textured soil where the organic matter is less than 1%.
- Do not feed treated hay, forage, or fodder. Livestock should be restricted from feeding/grazing of treated cover crops.
- Do not cut treated crop for feed, hay, forage, fodder or graze treated cotton to livestock.

- The minimum waiting intervals must be observed prior to planting cotton or crop injury may occur.
- Do not make preplant applications of this product to cotton in geographic areas with average annual rainfall less than 25".

Not currently registered for use in California.

#### Notes:

- Refer to Table 1 to determine use rates for specific targeted weed species, but do not exceed rate stated for cotton preplant.
- For applications applied 75 or more days† before planting, follow the directions and precautions for Postharvest, Fallow, Crop Stubble listed in Section VII of the container label.
- Best results will be obtained when product is mixed with additives or tank mixed with additional herbicides see ADDITIVES and TANK MIXING INFORMATION sections of label.

Minimum waiting interval excludes days when ground is frozen.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

#### Rates

[field\\_rates 0](#)

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#### Restricted Entry Interval

48 hours

#### Timings

[Preplant](#)

[Postemergence \(Weed\)](#)