# COTTON - MULTIPLE APPLICATIONS - WEEDS CONTROLLED - NC AND VA

General Information

#### PRODUCT INFORMATION

Observe all precautions and limitations on the labels of each product used in tank mixtures. Tank mixtures are permitted only in those states where the tank mix partner is registered.

When an adjuvant is to be used with the product, Makhteshim Agan of North America, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

PARALLEL PCS is a selective herbicide recommended as a preplant surface- applied, preplant incorporated, or preemergence treatment in water or fluid fertilizer for control of most annual grasses and certain broadleaf weeds in cotton, peanuts, pod crops, potatoes, safflower, grain or forage sorghum, soybeans, and tomatoes.

Restriction: Do not use in nurseries, turf, or landscape plantings.

Do not apply under conditions which favor runoff or wind erosion of soil containing the product to non-target areas.

To prevent off-site movement due to runoff or wind erosion;

- 1. Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
- 2. Do not apply to impervious substrates such as paved or highly compacted surfaces.
- 3. 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.

Where directions specify a PARALLEL PCS tank mixture with AAtrex formulations,

other brands of atrazine may be used. Follow the rates, recommendations, and limitations on the AAtrex or respective atrazine product label if other brands of atrazine are used.

Note: Certain states may have established rate limitations for atrazine within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of the label to deviate from state use regulations.

If PARALLEL PCS is incorporated, any supplemental tillage before planting must not exceed the depth of incorporation.

Dry weather following preemergence application of PARALLEL PCS or a tank mixture may reduce effectiveness. Cultivate if weeds develop.

Where reference is made to weeds partially controlled, partial control can either mean erratic control from good to poor or consistent control at a level below that generally considered acceptable for commercial weed control.

Precaution: Injury may occur following the use of PARALLEL PCS under abnormally high soil moisture conditions during early development of the crop.

## SOIL TEXTURES AND HERBICIDE RATES

Where rates are based on coarse-, medium-, or fine-textured soils, it is understood that soil textural classes are generally categorized as follows:

Coarse Sand, Loamy sand, Sandy loam

Medium Loam, Silt loam, Silt

Fine Sandy clay loam, Silty clay loam, Clay loam, Sandy clay, Silty loam, Clay

Within rate ranges in the rate tables and elsewhere on the label, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter.

Note: PARALLEL PCS may be applied preemergence alone, or in combination with tank mix partners specified on the label, following preplant incorporated herbicides when used according to their label recommendations, provided that such use is not prohibited on the respective labels.

Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution in a responsible manner. Do not use a sprayer or applicator contaminated with any other materials, or crop damage or clogging of the application device may result.

## APPLICATION PROCEDURES

# **Application Timing**

PARALLEL PCS alone or in some tank mixtures with other labeled herbicides may be applied for weed control in certain crops at various times. Refer to the given crop section of the label to determine if application timings listed below are recommended.

- a. Preplant Surface-Applied: For minimum-tillage or no-tillage systems only, PARALLEL PCS alone and some PARALLEL PCS tank mixtures may be applied up to 45 days before planting certain crops. Use only split applications for treatments made 30-45 days before planting, with 2/3 the recommended broadcast rate for the crop and soil texture applied initially and the remaining 1/3 at planting. Treatments less than 30 days before planting may be made either as a split or a single application. Refer to individual crop to determine if early preplant surface application is recommended. If weeds are present at the time of treatment, apply in a tank mixture combination with a contact herbicide (for example, Gramoxone Extra or Roundup). Observe directions for use, precautions, and restrictions on the label of the contact herbicide. To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.
- b. Preplant Incorporated: Apply PARALLEL PCS to the soil and incorporate into the top 2 inches of soil within 14 days before planting, using a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 2-inch incorporation. Use a preplant incorporated application if furrow irrigation is used or when a period of dry weather after application is expected. If crop will be planted on

beds, apply and incorporate PARALLEL PCS after bed formation, unless specified otherwise.

c. Preemergence: Apply PARALLEL PCS during planting (behind the planter) or after planting but before weeds or crops emerge.

## SPECIAL APPLICATION PROCEDURES

- a. Preplant Incorporated: CA Only (Safflower, Pod Crops): Broadcast PARALLEL PCS to the soil and thoroughly incorporate with a disk or similar implement set to till 4-6 inches deep. For more thorough incorporation, till the soil in 2 different directions (cross-till). Crops may be planted on flat surface or on beds. Caution should be used when forming the beds that only soil from the PARALLEL PCS treated zone is used (i.e., untreated soil should not be brought to soil surface). If the application is made to preformed beds, incorporate PARALLEL PCS with a tillage implement set to till 2-4 inches deep. Care should be taken during tilling to keep the tilled (PARALLEL PCS treated) soil on the beds. Preemergence: Apply PARALLEL PCS after planting. Water with sprinkler or flood irrigation within 7-10 days.
- b. Fall Application (Only in IA, MN, ND, SD, WI, North of Route 20 in the state of NE, and North of Route 136 in the state of IL): Do not apply to frozen ground. Use on medium and fine soils with greater than 2.5% organic matter that will be planted to soybeans the next spring. Ground may be tilled before or after application. Do not exceed a 2- to 3-inch incorporation depth if tilled after treatment. Note: If a spring application is made, the total rate of the fall plus spring applications must not exceed the maximum total rate for the specific crop or illegal residues may result.
- c. Ground Application: Apply PARALLEL PCS alone or in tank mixtures by ground equipment in a minimum of 10 gals. of spray mixture per acre unless otherwise specified.

Use sprayers that provide accurate and uniform application. For PARALLEL PCS tank mixtures with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

Calculate the amount of herbicide needed for band treatment by the formula (see label):

NOTE: For information on applying in lower volumes of carrier, see Low Carrier Application in Appendix B (in the label).

For application by air or through center pivot systems, see Appendices C (in the label and D. Appendix C (in the label includes Aerial Drift Management and Aerial Drift Reduction Advisory sections.

For information on impregnating dry fertilizer, see Appendix E (in the label)

Control may be improved by following these suggested procedures:

- 1. Thoroughly till moist soil to destroy germinating and emerged weeds. If PARALLEL PCS is to be applied preplant incorporated, this tillage may be used to incorporate PARALLEL PCS if uniform 2-inch incorporation is achieved as recommended under Application Procedures.
- 2. Plant crop into moist soil immediately after tillage. If PARALLEL PCS is to be used preemergence, apply at planting or immediately after planting. 3. If available, sprinkler irrigate within 2 days after application. Apply 1 /2-1 inch of water. Use lower water volume (1 /2 inch) on coarse-textured soils and higher volume (1 inch) on fine-textured soils. Also, refer to the section on Center Pivot Irrigation Application for this method of applying PARALLEL PCS.
- 4. If irrigation is not possible and rain does not occur within 2 days after planting and application, weed control may be decreased. Under these conditions, a uniform, shallow cultivation is recommended as soon as weeds emerge.

Refer in the label regarding tank mix information.

Limitations, Restrictions, and Exceptions

#### COTTON

Multiple Applications: Where weed pressure is heavy, difficult to control species are expected, or reinfestation may occur, and a weed control program is used, multiple applications of PARALLEL PCS are effective when used as part of the weed control program. Apply as a preplant incorporated or preemergence treatment and follow with an application postemergence to cotton before weeds emerge or after clean cultivation to remove existing weeds, since PARALLEL PCS will not control emerged

weeds. Cotton should be at least 3 inches tall at the postemergence timing. Apply PARALLEL PCS postemergence over a previous preplant or preemergence PARALLEL PCS application as shown in table in the label.

In sprinkler-irrigated areas, sprinkler irrigate after application with 1/2-1 inch of water (1/2 inch on coarse-textured soils to 1 inch on fine-textured soils) to incorporate PARALLEL PCS. In furrow-irrigated areas, apply PARALLEL PCS, incorporate with a rolling cultivator or similar implement that provides uniform shallow incorporation (2 inches or less), and then irrigate. In non-irrigated areas, if at least 1/2 inch of rainfall does not occur within 10 days after application, cultivate with a rolling cultivator or similar implement that provides uniform shallow incorporation of PARALLEL PCS.

Note: For best control of yellow nutsedge and suppression of seedling johnsongrass, apply PARALLEL PCS preplant incorporated, preemergence, or postemergence to cotton and preemergence to weeds at the maximum rate for the soil texture, whether applied alone or in combinations. Do not apply more than a total of 2.0 pts./A on coarse soils or 4.0 pts./A of PARALLEL PCS on medium and fine soils during a growing season. These treatments may be applied over previous registered herbicide treatments.

Precautions: To avoid crop injury, (1) Do not apply PARALLEL PCS on sand or loamy sand soils, or in areas where water is likely to \"pond\" over the bed; (2) To avoid concentration in the seed furrow, do not make broadcast applications of PARALLEL PCS to cotton planted in furrows more than 2 inches deep. Band applications may be made to cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow; (3) In furrow-planted cotton, to avoid concentration in the furrow and potential injury, do not apply PARALLEL PCS postemergence until after first \"knifing\" or cultivation to level soil surface. (4) Do not apply over-thetop in fluid fertilizer or any other adjuvant, surfactant, oil, or other pesticide not recommended in the COTTON section of the label, or injury may occur; (5) Do not apply on Taloka silt loam. (6) Do not use in Gaines County, TX.

Restriction: Do not graze or feed forage or fodder from cotton to livestock, or illegal residues may result.

NC AND VA: Apply 1.0-1.33 pints / acre (Preemergence Only) + 1.0-1.33 to 3-12 inches Cotton (Postemergence)

M	et	h	0	0

Broadcast/Foliar Air

**Broadcast/Foliar Ground** 

Band

Broadcast/Foliar Air

**Broadcast/Foliar Ground** 

Band

Broadcast/Foliar Air

**Broadcast/Foliar Ground** 

Band

Rates

field rates 0

•

**Restricted Entry Interval** 

24 hours

**Timings** 

Postemergence (Crop)

Preemergence (Crop)

Preemergence (Weed)