

# **COTTON - PREEMERGENCE - WEED SUPPRESSION**

## General Information

### DUPONT STAPLE LX HIGHLIGHTS

- STAPLE LX provides control of a wide range of broadleaf weeds in cotton.
- STAPLE LX can be used preemergence in all states excluding California. Postemergence (over the top) and post-directed sprays can be used in all states.
- Preemergence applications must be applied by ground equipment.
- Post emergence applications may be applied by ground or aerial equipment (except Arizona and California).
- Post emergence applications may be made any time from emergence up to 60 days before harvest.
- Always include a surfactant for control of emerged weeds.
- STAPLE LX may be tank mixed with most herbicides (except "Dual" over the top), insecticides (except malathion), and PGR's.
- Consult label text for complete instructions. Always read and follow label instructions.

### PRODUCT INFORMATION

DuPont STAPLE LX may be applied preemergence (except in California), postemergence or post-directed to cotton and weeds by ground application equipment. STAPLE LX may also be applied postemergence to cotton and weeds by aerial equipment (except in Arizona and California).

If STAPLE LX is used in a tank mixture with other herbicides, read and follow all use instructions, warnings and precautions on companion herbicide labels.

### BIOLOGICAL INFORMATION

STAPLE LX is absorbed by weed foliage following postemergence application.

Thorough coverage of target weed species, including the weed terminals or growing points, is required to obtain best results. When using a banded spray application, the band spray area must be of sufficient width to ensure thorough coverage of target weeds.

Growth of susceptible weeds is rapidly inhibited. Growing points and leaves of susceptible weeds appear yellow in 5-10 days. Death of leaf tissue and growing points will follow in some species, while others remain green but stunted and noncompetitive.

Susceptible weeds are controlled in 14-28 days.

Do not apply STAPLE LX on any crops other than cotton.

Most crops other than cotton are sensitive to STAPLE LX. All direct and indirect contact (such as drift) to crops other than cotton or land not scheduled to be planted to cotton in the current growing season must be avoided.

## RESISTANCE

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field.

Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices within and between crop seasons such as using a combination of tillage, retreatment, tank-mix partners and/or sequential herbicide applications that have a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative cultural practices or

herbicide recommendations available in your area.

## INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency in your State responsible for pesticide regulation.

STAPLE LX must be used only in accordance with the directions on the label or in separate published DuPont directions.

DuPont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically instructed by the label. User assumes all risk associated with such non-labeled use.

## APPLICATION INFORMATION

## ENVIRONMENTAL CONDITIONS FOR OPTIMUM PERFORMANCE

Weather: Conditions which are conducive to healthy, actively growing weeds optimize DuPont STAPLE LX postemergence weed control performance. Ideal conditions include warm soil temperatures (70 Deg. F or more) and adequate soil moisture before, during and immediately after application.

Rainfastness: Rainfall immediately after treatment may wash STAPLE LX off the weed foliage and result in reduced weed control. A minimum of 4 hours is needed to allow STAPLE LX to be absorbed by weed foliage.

## SPRAY VOLUMES

Ground Application - Apply uniformly by ground with a properly calibrated low pressure (20-40 psi) stabilized boom or cultivator mounted sprayer with appropriate nozzles for the intended application method. Use a minimum of 10 gal. water per acre. Under heavy weed pressure or dense crop foliage, increase minimum spray volume to 20-40 gal. per acre.

Aerial Application (except Arizona and California) - Use orifice discs, cores and nozzle types and arrangements that will provide for optimum spray distribution and maximum coverage at a minimum of 3 GPA. Do not apply during inversion conditions, when winds are gusty, or when other conditions will favor poor coverage and/or drift.

## SEQUENTIAL APPLICATIONS

Annual broadleaf weeds may have more than one flush of emerging seedlings. Also, regrowth of treated annual weeds may occur due to application being made to weeds under stress from adverse growing conditions. To control weeds under these conditions, a sequential application of STAPLE LX may be necessary.

If a respray of treated annual weeds is necessary, allow the weeds to begin to regrow prior to making a second application of STAPLE LX.

When using STAPLE LX in sequential treatment program, allow a minimum of 7 days between applications.

## USE RESTRICTIONS

- Do not exceed 2.1 fl oz/A preemergence.
- Do not exceed 3.8 fl oz/A in a single postemergence application.
- Do not exceed 5.1 fl oz per acre per year.
- In West Texas (broadly defined as West of Highway 83), do not apply more than 3.2 fluid ounces total per acre per year.

Where continuous cotton is grown, do not apply more than 5.1 fluid ounces total per acre per year.

- Do not apply this product through any type of irrigation system.
- Do not apply to irrigated land where tail water will be used to irrigate crops other than cotton.
- Do not apply within 60 days of harvest.

#### PIMA COTTON PRECAUTION

Foliar injury to Pima cotton varieties from postemergence applications of STAPLE LX can be more severe than that occasionally observed on upland cotton varieties (see NOTE: under POSTEMERGENCE USE section of label). Any of the plant stress conditions mentioned in the POSTEMERGENCE USE Note paragraph may further increase the severity of the injury to Pima varieties. Consequently, DuPont is not responsible for any crop injury arising from the use of STAPLE LX on Pima cotton varieties.

Refer in the label regarding tank mix information.

#### Limitations, Restrictions, and Exceptions

#### COTTON

##### PREEMERGENCE USE

STAPLE LX may be applied preemergence in cotton to aid in the control of many problem weeds.

STAPLE LX is absorbed by weed roots following a preemergence application.

Susceptible weeds may germinate and emerge, but growth is rapidly inhibited. Death of leaf tissue and growing points will follow in some species while others remain green but stunted and non-competitive.

Preemergence applications of STAPLE LX require rainfall or sprinkler irrigation to activate the herbicide. Degree and duration of weed control depend on: rate used, weed spectrum, growing conditions at and following time of treatment, soil texture, organic matter, soil moisture at the time of treatment, and precipitation following treatment.

The amount of rainfall required to activate STAPLE LX preemergence treatments depends on the amount of soil moisture available when rainfall is received. Several rainfalls of 0.25 inch or less are not as effective as one rainfall or supplemental irrigation of 0.5-1 inch for activation.

Note: Temporary leaf yellowing and/or stunting may occur following a preemergence treatment. Plant stresses from seedling diseases, cool soil temperatures (60°F or less), thrips injury or excessive soil moisture may increase the sensitivity of cotton to injury from preemergence treatments of STAPLE LX.

#### PREEMERGENCE USE PRECAUTIONS

- Do not use on cotton planted in furrows.
- Do not use on soils with less than 0.5% organic matter (OM).
- Do not use on coarse soils such as sands or loamy sands.
- Do not apply more than one preemergence application per year.
- Do not apply DuPont STAPLE LX preemergence by aerial application.

#### Method

[Broadcast/Foliar Ground](#)

#### Pre-Harvest Interval

60 days

#### Rates

[field rates 0](#)

-

Restricted Entry Interval

4 hours

Timings

[Preemergence \(Crop\)](#)