

1/9

77-175 (11-20)

()

SE

Thomas D. Rogerson, Ph.D.
Rohm & Haas Company
Independence Mall West
Philadelphia, PA 19105

Dear Dr. Rogerson:

Subject: Revised Supplemental Labeling - Cotton
Goal 2E Herbicide
EPA Registration No. 707-145 ✓
Goal 1.6E Herbicide
EPA Registration No. 707-174
Your Submissions Dated September 1 and 19, 1988

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

As labeling is printed, delete all references to dinoseb (dinitro). Dinoseb registrations have been subject to cancellation and suspension activity.

For EPA Registration No. 707-174, under the weed list for Probe tank mix, note the correct spelling of Spurge.

Sincerely yours,

Richard F. Mountfort *RFM*
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (TS-767C)

Enclosure

51079:I:Mountfort:MF-12:KENCO:9/27/88:10/7/88:CT:VO:CL

2/9

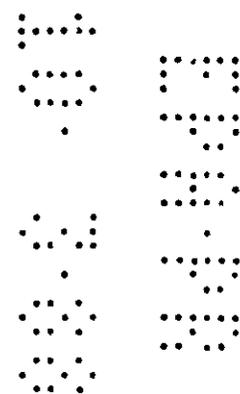
ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105



GOAL® 2E Herbicide (707-145)
Application for Amended Registration
Revised Supplemental Labeling for Use on Cotton

Proposed Revised Labeling





SUPPLEMENTAL LABELING FOR GOAL 2E HERBICIDE

REVISIONS
DATE

DIRECTIONS FOR USE
COTTON
POST-DIRECTED SPRAY

SEP 28 1988

GENERAL INFORMATION

GOAL 2E is a selective herbicide for use as a post-directed application for broadleaf weed control in cotton. Cotton leaves that are accidentally sprayed will exhibit necrotic spotting and may drop from the plant, therefore, care must be exercised to avoid spray contact with the cotton leaves. Crop response may be enhanced if applications are made when excessive soil moisture is present or if rainfall occurs following application. Cotton will outgrow this condition and continue to develop normally.

707-145
Herbicide
Fungicide Act
Herbicide
707-145

GOAL 2E herbicide may be applied to cotton grown in the Southern Cotton States (Alabama, Arkansas, Georgia, Louisiana, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee and Texas) and in the Western Cotton States (Arizona and California). For specific use instructions, see Geographic Location Use Directions.

WEEDS CONTROLLED POSTEMERGENCE

When GOAL 2E herbicide is applied as a post-directed application at the recommended weed stage and dosage in cotton, the following weeds are controlled:

COCKLEBUR, COMMON	Xanthium pensylvanicum	
CROTON, TROPIC	Croton glandulosus	
GROUNDCHERRY, CUTLEAF	Physalis angulata	
GROUNDCHERRY, WRIGHT	Physalis wrightii	
JIMSONWEED	Datura stramonium	
LAMBSQUARTERS, COMMON	Chenopodium album	
MORNINGGLORY, ANNUAL (up to 6 leaf)	Ipomoea species	
NIGHTSHADE, AMERICAN BLACK	Solanum nodiflorum	.....
NIGHTSHADE, BLACK	Solanum nigrum	.....
NIGHTSHADE, HAIRY	Solanum sarrachoides	.....
PIGWEED, REDROOT	Amaranthus retroflexus	.....
*POINSETTIA, WILD	Euphorbia heterophylla	.....
PURSLANE, COMMON	Portulaca oleracea	.....
SESBANIA, HEMP	Sesbania exaltata	.....
**SICKLEPOD	Cassia obtusifolia	.....
*SIDA, PRICKLY (TEAWEED)	Sida spinosa	.....
SMARTWEED, PENNSYLVANIA	Polygonum pensylvanicum	.....
VELVETLEAF	Abutilon theophrasti	.....

* Multiple applications may be required for acceptable control.
** Post direct applications of GOAL 2E herbicide will kill or suppress seedlings not exceeding the one true leaf stage.

GEOGRAPHIC LOCATION USE DIRECTIONS

DOSAGE (SOUTHERN AND WESTERN COTTON)

GOAL 2E herbicide is recommended as a post-directed application at 1 to 2 pints (0.25 to 0.5 lb. active) per acre*. Optimum control is achieved when 2 pints of GOAL 2E herbicide (0.5 lb. active) per acre* is applied to weed seedlings not exceeding 4 true leaves. Effective control of succulent weed seedlings in the 2 to 3 leaf stage can usually be obtained when 1 pint of GOAL 2E herbicide (0.25 lb. active) per acre* is applied. See "Mixing Directions" for surfactant recommendation. Weeds should be in the seedling stage, young and actively growing. Do not count cotyledon leaves.

*Dosages listed are for broadcast application. For banded application, the amount of GOAL 2E herbicide used per acre should be reduced according to the following formula:

$$\frac{\text{Band Width (in.)}}{\text{Row Width (in.)}} \times \text{Rate per Acre Broadcast} = \text{Amount Needed per Acre for Banded Application}$$

TIMING

SOUTHERN COTTON

(ALABAMA, ARKANSAS, GEORGIA, LOUISIANA, MISSISSIPPI, MISSOURI, NEW MEXICO, NORTH CAROLINA, OKLAHOMA, SOUTH CAROLINA, TENNESSEE AND TEXAS)

Cotton plant height must be a minimum 6 inches or greater. Application to cotton plants less than 6 inches tall may result in severe crop injury and is not recommended. In cotton 6 to 8 inches tall, GOAL 2E herbicide must be applied using rigid precision ground sprayer equipment. The use of spray shields is recommended to avoid spray contact with cotton foliage. Use branch lifters or shields if excessive spray contact on larger cotton plants (8 inches or greater) cannot be avoided by the directed spray.

WESTERN COTTON

(ARIZONA AND CALIFORNIA)

Cotton plant height must be a minimum 6 inches or greater. Application to cotton plants less than 6 inches tall may result in severe crop injury and is not recommended. In cotton 6 to 8 inches tall, GOAL 2E herbicide must be applied using rigid precision ground sprayer equipment. The use of spray shields is recommended to avoid spray contact with cotton foliage. Use branch lifters or shields if excessive spray contact on larger cotton plants (8 inches or greater) cannot be avoided by the directed spray.

To obtain the maximum benefit of postemergence activity, encourage weed emergence by irrigating prior to spraying. Irrigate immediately following herbicide application to obtain greatest benefit of preemergence activity from GOAL 2E herbicide on nightshade and groundcherry species.

METHOD OF APPLICATION (SOUTHERN AND WESTERN COTTON)

Accurate, uniform placement of GOAL 2E herbicide spray is essential for effective weed control and to minimize cotton injury. As a directed postemergence application, GOAL 2E herbicide should be applied at 20 to 25 psi using 20 to 40 gallons of spray on a broadcast acre basis. Do not exceed 25 psi. Spray should be directed towards the base of the cotton plant. Cotton foliage receiving accidental spray or drift may be injured. Weeds should be in the seedling stage, young and actively growing.

GOAL 2E herbicide can be applied using a post direct spray rig with only 2 flat fan nozzles per row, 1 nozzle on each side of the row, additional care should be taken when adjusting sprayer prior to application. For best coverage, it is suggested to use 4 flat fan nozzles per row, 2 nozzles on each side of the row. The two forward nozzles should point forward and downward while the rear nozzles should point to the rear and downward. With either spray system, nozzles should be adjusted to cover the weed foliage with minimum contact to the cotton plant. Do not use cone nozzles.

MIXING DIRECTIONS

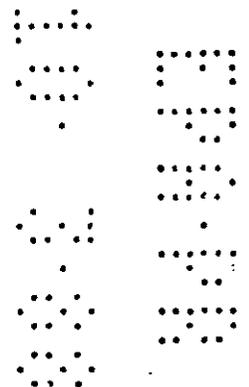
Fill the spray tank at least one-third full of clean water and add the recommended amount while the pump and agitator are running. Complete filling of the spray tank with water and then add 2 to 4 pints of TRITON AG-98, or comparable 80% active nonionic surfactant cleared for use on growing crops, per each 100 gallons of spray to assist in contact activity on dusty weeds. The addition of four pints of TRITON AG-98 (or comparable 80% active nonionic surfactant cleared for application to growing crops) per each 100 gallons of spray is recommended to enhance postemergence activity when hard water (greater than 600 ppm) is used as a carrier. Maintain agitation until spraying is complete.

SPECIFIC USE RESTRICTIONS (SOUTHERN AND WESTERN COTTON)

GOAL 2E Herbicide Used Alone

- Read and observe all label directions before using.
- Southern Cotton: Do not apply more than 2 pints (0.5 lb. active) per broadcast acre of GOAL 2E herbicide per season as a result of a single application or multiple applications.
- Western Cotton: Do not apply more than 2 pints (0.5 lb. active) of GOAL 2E herbicide per broadcast acre in a single application, or more than a total of 4 pints (1.0 lb. active) of GOAL 2E herbicide per broadcast acre per season as a result of multiple applications.
- Use GOAL 2E herbicide only for recommended purposes and at recommended rates.
- Do not use plants treated with GOAL 2E herbicide for feed or forage.
- Do not spray GOAL 2E herbicide after initiation of bloom.

- Do not contaminate irrigation water or water used for domestic purposes.
- Do not feed or graze animals on any areas treated with GOAL 2E herbicide.
- Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use. Residual GOAL 2E herbicide remaining in spray tank may damage other crops. To assist removal of GOAL herbicide residue in spray equipment, TRITON AG-98 or TRITON CS-7 may be added at the rate of 1 quart per 100 gallons of water during flushing.
- Do not apply when weather conditions favor drift. Avoid drift to all non-target areas. GOAL 2E herbicide is phytotoxic to plant foliage.
- Do not rotate to any crops other than cotton, onions, soybeans or spearmint/peppermint within a 10 month period after treatment.
- Do not treat ditch banks or waterways with GOAL 2E herbicide.



JAH:fs
6076E/20j
8/2/88

TANK MIXES WITH GOAL 2E HERBICIDE

IMPORTANT: Read and observe all label directions before using. When tank mixing, always read all individual manufacturers' labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

DOSAGE

For postemergence control of susceptible grassy and broadleaf weeds in cotton, a tank mixture of GOAL 2E herbicide with either Bladex, Caporal, Caporal plus, Cotoran, Cotoran plus, dinitro, Karmex, Lorox, MSMA or Probe can be applied as a post directed application. Apply at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

RATE OF PRODUCT PER ACRE

BLADEX 4L	CAPORAL 4L	CAPORAL PLUS	COTORAN 80W
1.2 to 2 pts.	1 to 1.3 pts.	4 pts.	1.25 to 2.5 lbs.
COTORAN PLUS	DINITRO 3EC	KARMEX 80W*	LOROX 4L**
4 pts.	4 to 6 pts.	0.25 to 0.5 lb.	1 to 1 1/2 pts.
MSMA 6.6	PROBE 75-W		
2.4 pts.	0.66 to 2.0 lbs.		

*Minimum cotton height 12 inches in Western irrigated cotton.

**Minimum cotton height 8 inches. Use only East of Rocky Mountains.

Herbicide rates listed are for broadcast application. For banded application, the amount of herbicide used per acre should be reduced as outlined under "GOAL 2E Herbicide Used Alone"

WEEDS CONTROLLED POSTEMERGENCE

In addition to the weeds controlled postemergence by GOAL 2E herbicide used alone, control of the following weeds is also obtained when tank mixed with the products listed below.

BLADEX

Crotalaria
Sicklepod
Sida, Prickly (teaweed)
Spurge
Starbur, Bristly

CAPORAL

Barnyardgrass
Crabgrass
Foxtail
Ragweed
Sida, Prickly (teaweed)

CAPORAL PLUS

Barnyardgrass
Brachiaria species
Crabgrass
Pusley, Florida
Ragweed
Sida, Prickly (teaweed)

COTORAN

Barnyardgrass
Foxtail
Pusley, Florida
Ragweed
Sicklepod
Sida, Prickly (teaweed)

COTORAN PLUS

Barnyardgrass
Brachiaria species
Crabgrass
Goathead
Pusley, Florida

DINITRO

Mercury, Three seed
Pigweed
Sida, Prickly (teaweed)

KARMEX

Pigweed
Purslane
Ragweed

LOROX

Beggarweed, Florida
Carpetweed
Purslane
Ragweed
Sicklepod
Sida, Prickly (teaweed)

MSMA

Dallisgrass
Goosegrass
Johnsongrass
Nutgrass
Watergrass

PROBE

Anoda, Spurred
Sicklepod
Sida, Prickly (teawood)
Spurge, Spotted

METHOD OF APPLICATION (SOUTHERN AND WESTERN COTTON)

Accurate, uniform placement of GOAL 2E herbicide spray is essential for effective weed control and to minimize cotton injury. As a directed postemergence application, GOAL 2E herbicide should be applied at 20 to 25 psi using 20 to 40 gallons of spray on a broadcast acre basis. Do not exceed 25 psi. Spray should be directed towards the base of the cotton plant. Cotton foliage receiving accidental spray or drift may be injured. Weeds should be in the seedling stage, young and actively growing.

MIXING DIRECTIONS:

Fill the spray tank at least one-third full of clean water. With the pump and agitator running, add the recommended amount of wettable powder or flowable herbicides to the spray tank. Then add the recommended amounts of EC formulation including GOAL 2E herbicide during the filling operation. Complete filling of the spray tank with water and then add 1 quart of a nonionic surfactant such as TRITON AG-98 or comparable 80% active nonionic surfactant cleared for application to growing crops, per each 100 gallons of spray. Maintain agitation until spraying is completed.

CULTURAL CONSIDERATIONS:

In addition to details previously listed under "GOAL 2E Herbicide Used Alone", read all individual manufacturers' labels. In interpreting all labels for the tank mixture, the most restrictive label specifications must apply.

SPECIFIC USE RESTRICTIONS GOAL 2E HERBICIDE TANK MIXES

In addition to the following, also observe all specific use restrictions previously listed under "GOAL 2E Herbicide Used Alone".

- When tank mixing, always read all individual manufacturers' labels. In interpreting all labels for the tank mixture, the most restrictive situations must apply.