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ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105



GOAL®1.6E Herbicide
EPA Reg. No. 707-174
Aerial Application to Fallow Beds

Proposed Labeling

ACCEPTED

APR 13 1990

Under the Federal Insecticide,
Fungicide and Rodenticide Act,
as amended, this pesticide is
registered under
EPA Reg. No. 707-174

ROHM AND HAAS COMPANY

INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19103

EPA Reg. No. 707-174-AA
EPA Est. No. 707-PA-1



**SUPPLEMENTAL LABELING FOR AERIAL APPLICATION OF
GOAL® 1.6E HERBICIDE ON FALLOW BEDS**

DIRECTIONS FOR USE

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Precautions and Storage and Disposal Instructions on back panel and attached use directions. If the conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

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

GENERAL INFORMATION

GOAL 1.6E is effective as a preemergence herbicide when used alone or as a postemergence herbicide when applied in a tank mix combination with Roundup® for the control of winter annual broadleaf weeds in fallow beds.

EXERCISE EXTREME CARE TO AVOID HERBICIDE CONTACT WITH ANY DESIRABLE DORMANT OR NON-DORMANT CROP, PLANT, TREE OR VEGETATION AS SEVERE INJURY MAY RESULT.

MINIMUM TREATMENT-PLANTING INTERVAL

When applying GOAL 1.6E herbicide as a fallow bed treatment at the recommended dosages, the following treatment to planting intervals are recommended:

<u>DIRECT SEEDED CROPS:</u>	<u>GOAL 1.6E Herbicide Use Rate</u>	
	<u>up to 1.25 pints/A</u>	<u>up to 2.5 pints/A</u>
CARROT	90 DAYS	90 DAYS
POTATO	60 DAYS	60 DAYS
SUGARBEET	60 DAYS	90 DAYS
OTHER ROOT/TUBER CROPS	90 DAYS	90 DAYS
ONIONS	180 DAYS	180 DAYS
OTHER BULB VEGETABLES	180 DAYS	180 DAYS
CABBAGE	90 DAYS	90 DAYS
CAULIFLOWER	90 DAYS	90 DAYS
OTHER BRASSICA CROPS	120 DAYS	120 DAYS
LETTUCE	90 DAYS	120 DAYS
OTHER LEAFY VEGETABLES (EXCEPT BRASSICA CROPS)	120 DAYS	120 DAYS

<u>DIRECT SEEDED CROPS:</u>	GOAL 1.6E Herbicide Use Rate	
	<u>up to 1.25 pints/A</u>	<u>up to 2.5 pints/A</u>
PEPPER	90 DAYS	120 DAYS
TOMATO	60 DAYS	120 DAYS
OTHER FRUITING VEGETABLES	120 DAYS	120 DAYS
CANTALOUPE	60 DAYS	90 DAYS
SQUASH	90 DAYS	120 DAYS
WATERMELON	60 DAYS	60 DAYS
OTHER CUCURBITS	90 DAYS	120 DAYS
DRY BEANS	60 DAYS	60 DAYS
PEANUT	60 DAYS	60 DAYS
SOYBEAN	0 DAYS	0 DAYS
OTHER LEGUME VEGETABLES	60 DAYS	60 DAYS
SAFFLOWER	60 DAYS	60 DAYS
CONIFER	0 DAYS	0 DAYS
CEREAL GRAINS (includes barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, wild rice)	10 MONTHS	10 MONTHS
OTHER SEEDED CROPS	180 DAYS	180 DAYS
COTTON (See specific labeling for fallowbeds to be planted to cotton)		

<u>TRANSPLANTED CROPS:</u>	GOAL 1.6E Herbicide Use Rate	
	<u>up to 1.25 pints/A</u>	<u>up to 2.5 pints/A</u>
BROCCOLI	0 DAYS	30 DAYS
CABBAGE	0 DAYS	30 DAYS
CAULIFLOWER	0 DAYS	30 DAYS
CELERY	30 DAYS	30 DAYS
CONIFER	0 DAYS	0 DAYS
GARLIC	0 DAYS	30 DAYS
GRAPE/KIWI	0 DAYS	0 DAYS
ONION	0 DAYS	30 DAYS
PEPPER	30 DAYS	30 DAYS
STRAWBERRIES	30 DAYS	30 DAYS
TOMATO	30 DAYS	30 DAYS
TREEFRUIT/NUT/CITRUS	0 DAYS	0 DAYS
ALL OTHER CROPS	90 DAYS	180 DAYS

IMPORTANT:

The fallow beds must be worked with a Lilliston or similar incorporation tool, to a depth of at least 4 inches prior to planting. It is important to thoroughly incorporate the soil surface prior to planting; weed control should not be expected following breaking of the soil surface. FAILURE TO ACHIEVE THOROUGH AND COMPLETE INCORPORATION, OR TO FOLLOW THE RECOMMENDED TREATMENT PLANTING INTERVAL MAY RESULT IN STAND REDUCTION AND/OR VIGOR REDUCTION OF THE PLANTED CROP.

Crop injury may be enhanced if newly seeded crops or transplants are under stress due to drought, flooding, excessive fertilizer or soil salts, low soil temperatures, wind injury, hail, frost damage, injury from previously applied pesticides, or injury due to insects or diseases.

GOAL 1.6E HERBICIDE USED ALONE DOSAGE

GOAL 1.6E herbicide should be used at 1.25 to 2.5 pints (0.25 to 0.5 lb. active) per broadcast acre. The lower rate (1.25 pints per acre) should provide up to 4 weeks of preemergence control of susceptible weeds and postemergence activity on susceptible weeds (up to 4 leaf stage). The higher rate (2.5 pints per acre) should provide preemergence control of susceptible weeds for up to 8 weeks and postemergence activity on susceptible weeds (up to 6 leaf stage). Best preemergence control is achieved when irrigation or rainfall occurs within 3 or 4 weeks following application.

WEEDS CONTROLLED

GOAL 1.6E herbicide will provide preemergence and postemergence* control of the following weeds when used at recommended dosages and weed stage.

CHEESEWEED (MALVA)	Malva parviflora
FIDDLENECK, COAST	Amsinckia intermedia
FILAREE, BROADLEAF	Erodium botrys
FILAREE, REDSTEM	Erodium cicutarium
GROUNDSEL, COMMON	Senecio vulgaris
HENBIT	Lamium amplexicaule
MINERSLETTUCE	Montia perfoliata
MUSTARD, BLACK	Brassica nigra
NETTLE, BURNING	Urtica urens
REDMAIDS	Calandrinia caulescens
ROCKET, LONDON	Sisymbrium irio
SHEPHERDSPURSE	Capsella bursa-pastoris
SOWTHISTLE, ANNUAL	Sonchus oleraceus

*Thorough spray coverage is essential to maximize the postemergence activity of GOAL 1.6E herbicide. For postemergence control, a tank mixture of GOAL 1.6E herbicide with Roundup is recommended.

AERIAL APPLICATION

GOAL 1.6E herbicide should be applied using swirl jet or hollow cone nozzles and a spray pressure less than 40 psi to deliver a minimum spray volume of 10 gallons of water per acre (minimum 5 gallons for GOAL 1.6E - Roundup tank mix). Application should be made at a height of 6 to 10 feet above the soil surface. It is suggested that the nozzles on the spray booms should not be placed any closer to the wing or rotor tips than 3/4 of the span; this will minimize the formation of spray or wing tip vortice roll. Nozzles should be spaced and positioned to produce a uniform spray pattern and to minimize or eliminate the formation of droplets 100 microns or less in diameter.

AVOID DRIFT:

WHEN APPLYING TO FALLOW BEDS, EXTREME CARE MUST BE EXERCISED TO PREVENT SPRAY DRIFT WHICH COULD RESULT IN DAMAGE TO OTHER CROPS OR DESIRABLE VEGETATION. USE THE FOLLOWING GUIDELINES WHEN AERIAL APPLICATIONS ARE TO BE MADE:

1. Do not apply when the wind direction is not stable, when inversion conditions exist, or when wind velocity exceeds 10 mph.
2. When wind speeds are 5 mph or less, maintain a minimum downwind buffer zone of at least 1/2 mile from all crops and desirable vegetation, except the following:

Maintain a minimum downwind buffer zone of:

- 150 feet from dormant treefruit, dormant vines and overwintering sugarbeets.
 - 650 feet from garlic, jojoba, legumes, onions, pastures, small grains, seedling sugarbeets, and nontargeted vegetable fallow beds.
3. When wind speeds are between 5 to 10 mph, downwind buffer zones in excess of those listed above are suggested.
 4. For upwind and side borders, maintain a minimum buffer zone of 150 feet from any nontargeted vegetable fallow bed, crop, or desirable vegetation.

The use of a drift control agent may be required by local regulations. However, the drift control agent may decrease the weed control activity.

IMPORTANT:

Aerial applicators must be familiar with the EPA registered label and follow the use precautions. Spraying GOAL 1.6E herbicide in a manner other than as recommended is done at the user's risk. Users are responsible for all loss or damage which results from such spraying. In addition, aerial applicators should follow all applicable state and local regulations and ordinances. In interpreting the label and local regulations, the most restrictive situations should apply to avoid drift hazards.

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 GOAL 1.6E herbicide. Complete filling of the spray tank with water and then add 1 quart of TRITON AG-98 or comparable 80% active nonionic surfactant, cleared for use on growing crops; per 100 gallons of spray. Maintain agitation until spraying is complete.

CULTURAL CONSIDERATIONS

In order for GOAL 1.6E herbicide to provide maximum preemergence activity, the bed or soil surface should be smooth and free of crop and weed trash (decaying leaves, clippings, dead weeds, etc.).

For best preemergence activity, irrigation or rainfall should occur within 3 or 4 weeks after application. Cultural practices which result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of GOAL 1.6E. The best results from GOAL 1.6E herbicide are from applications to established beds or soil surfaces which are left undisturbed during the time period for which weed control is desired.

TANK MIXES WITH GOAL 1.6E 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 mix, the most restrictive situations must apply.

DOSAGE

GOAL 1.6E herbicide can be tank mixed with Roundup to obtain postemergence control of annual grassy weeds, volunteer grains and broadleaf weeds. Tank mix 1.25 to 2.5 pints (0.25 to 0.5 lb. active) of GOAL 1.6E herbicide with 0.75 to 1.0 pint (0.38 to 0.5 lb. active) of Roundup for each acre treated. Apply in a minimum of 5 gallons of water per acre at the recommended rates and growth stages to susceptible weed species in a manner described on the respective labels.

TANK MIXING DIRECTIONS

Fill the spray tank at least one-third full of clean water and add the recommended amounts of GOAL 1.6E herbicide and Roundup while the pump and agitator are running. Complete filling of the spray tank with water. Add 1 quart of TRITON AG-98 or comparable 80% active nonionic surfactant, cleared for use on growing crops, per 100 gallons of spray. Maintain agitation until spraying is complete.

CULTURAL CONSIDERATIONS: In addition to details previously listed under "GOAL 1.6E Herbicide Used Alone," read all individual manufacturers' labels. In interpreting all labels for the tank mixture, the most restrictive cultural situations must apply.

FALLOW BED AIR APPLICATION USE RESTRICTIONS

The following use restrictions should be observed when GOAL 1.6E herbicide is used as recommended on this label.

- Follow the General Use Restrictions listed on the EPA registered label.
- 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.
- Do not apply more than 2.5 pints (0.5 lb. active) of GOAL 1.6E herbicide per acre per fallow season.

GOAL® 1.6E and TRITON AG-98 are registered trademarks of Rohm and Haas Company.

ROUNDUP® is a registered trademark of Monsanto Company.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

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INDEPENDENCE MALL WEST
PHILADELPHIA, PENNSYLVANIA 19105



GOAL®1.6E Herbicide
EPA Reg. No. 707-174
Application to Dormant Cottonwood Plantings

Proposed Labeling

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ACCEPTED
APR 13 1990

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, this pesticide
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PHILADELPHIA, PENNSYLVANIA 19105

EPA Reg No. 707-174
EPA Est. No. 707-PA-1



SUPPLEMENTAL LABELING FOR GOAL 1.6E HERBICIDE

DIRECTIONS FOR USE

GOAL® 1.6E Herbicide for Weed Control in dormant Cottonwood Plantings.

NOTICE: Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Precautions and Storage and Disposal Instructions on back panel and attached use directions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

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

GENERAL INFORMATION

GOAL 1.6E is an effective herbicide for postemergence and preemergence control of certain broadleaf weeds in cottonwood plantings. GOAL 1.6E herbicide may be applied postemergence or be post directed to the base of the cottonwood tree. Applications must only be made prior to bud break to avoid possible phytotoxicity to the cottonwood foliage. Applications made after bud break may result in injury to the cottonwood plant and are not recommended.

DOSAGE

Apply 5 to 10 pints (1.0 to 2.0 lbs. active) of GOAL 1.6E herbicide per broadcast acre for preemergence and postemergence weed control. The addition of 1 quart of TRITON AG-98 or a comparable 80% active nonionic surfactant per 100 gallons of spray mix will assist in spray coverage and wetting of weeds for postemergence control.

For banded application, the amount of GOAL 1.6E herbicide used per acre should be reduced according to the following formula:

$$\frac{\text{Band width (in.)}}{\text{Row width (in.)}} \times \text{Rate per Acre Broadcast} = \text{Amount Need per Acre For Banded Application}$$

WEEDS CONTROLLED

When GOAL 1.6E herbicide is applied preemergence or postemergence to weed seedlings (not exceeding 6 leaf stage) at recommended dosages, the following broadleaf weeds are controlled:

GROUNDSEL, COMMON
 LAMBSQUARTERS, COMMON
 KNOTWEED, PROSTRATE
 MUSTARD, HEDGE
 SHEPHERDSPURSE
 SMARTWEED, PENNSYLVANIA

Senecio vulgaris
 Chenopodium album
 Polygonum aviculare
 Sisymbrium officinale
 Capsella bursa-pastoris
 Polygonum pensylvanicum

TIMING AND METHOD OF APPLICATION

For optimum weed control, GOAL 1.6E herbicide should be applied prior to weed emergence. Preemergence applications should be made prior to or immediately after transplanting dormant cottonwood seedlings. Applications must be made prior to bud break of the cottonwood trees.

GOAL 1.6E herbicide should be applied in a minimum of 20 gallons of water per acre depending upon density of emerged weeds. Spray volume should be increased as weed height and density increase. Use a low pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

MIXING DIRECTIONS

Fill the spray tank at least one-third full of clean water and add the recommended amount of GOAL 1.6E herbicide while the pump and agitator are running. 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, per 100 gallons of spray. Maintain agitation until spraying is completed.

CULTURAL CONSIDERATIONS

In order to provide maximum effectiveness of preemergence activity of GOAL 1.6E herbicide, the soil surface should be free of soil clods and crop or weed trash.

For best preemergence activity, at least 1/4" of water is necessary within 3 to 4 weeks after application. Cultural practices which result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of GOAL 1.6E. Cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment. The best results from GOAL 1.6E herbicide are from applications to soil surfaces which are left undisturbed during the time period for which weed control is desired.

USE RESTRICTIONS - GOAL 1.6E HERBICIDE

The following use restrictions should be observed when GOAL 1.6E herbicide is used as recommended on this label.

- 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.
- GOAL 1.6E herbicide should only be applied to dormant healthy cottonwood stock.

- Do not apply more than 10 pints (2.0 lb. active) per treated acre per growing season as a result of single or multiple applications.
- Do not contaminate irrigation water or water used for domestic purposes.
- Do not use any plants treated with GOAL 1.6E herbicide for feed or forage.
- Do not feed or allow animals to graze on any areas treated with GOAL 1.6E herbicide.
- GOAL 1.6E herbicide should be applied only by ground application equipment except as specifically directed on this label or on other approved Rohm and Haas Company Supplemental labeling.
- Do not apply when weather conditions favor drift. Avoid drift to all nontarget areas. GOAL 1.6E herbicide is phytotoxic to plant foliage.
- Thoroughly flush spray equipment (tank, pump, hoses and boom) with clean water before and after each use. Residual GOAL 1.6E herbicide remaining in spray equipment may damage other crops. To assist removal of GOAL 1.6E herbicide residues in spray equipment, TRITON AG-98 or TRITON CS-7® may be added at the rate of one quart per 100 gallons of water during flushing.
- Use GOAL 1.6E herbicide only for recommended purposes and at recommended rates.
- Do not treat ditch banks or waterways with GOAL 1.6E herbicide.
- CHEMIGATION: Do not apply this product through any type of irrigation system.
- ROTATION CROP RESTRICTIONS

Do not rotate to small-grain crops (includes barley, buckwheat, corn, proso millet, pearl millet, oats, popcorn, rice, rye, sorghum, triticale, wheat, wild rice) within 10 months following a GOAL treatment.

Do not direct seed any crops, other than GOAL-labeled crops, within 60 days following a GOAL treatment.

Do not transplant seedling crops, other than GOAL-labeled crops, within 30 days following a GOAL treatment.

IMPORTANT: TREATED SOIL MUST BE THOROUGHLY INCORPORATED TO A DEPTH OF 4 INCHES AFTER HARVEST (OR ABANDONING) OF THE TREATED CROP BUT PRIOR TO PLANTING OF THE ROTATIONAL CROP. FAILURE TO ACHIEVE THIS THOROUGH AND COMPLETE INCORPORATION OR TO FOLLOW THE REQUIRED MINIMUM PLANT-BACK INTERVAL MAY RESULT IN CROP INJURY. STAND REDUCTION AND/OR VIGOR REDUCTION OF THE PLANT-BACK CROP.

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See specific fallow bed labeling regarding crop planting information for applications of GOAL 1.6E made to a fallow bed or fallow field.

CONDITIONS OF SALE AND WARRANTY

Rohm and Haas warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions under normal conditions of use. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES EITHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Handling, storage and use of the product by Buyer or User are beyond the control of Rohm and Haas, and Seller. Risks such as crop injury, ineffectiveness or other unintended consequences, resulting from, but not limited to, weather or soil conditions, presence of other materials, disease, pests, drift to other crops or property or failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

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