

**USE DIRECTIONS FOR:**

- CONIFER

Before using this product, read the entire Precautionary Statements, Conditions of Sale and Warranty, Directions for Use, Use Restrictions and Storage and Disposal Instructions. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

## KEEP OUT OF REACH OF CHILDREN WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

**STATEMENT OF PRACTICAL TREATMENT**

**IF IN EYES:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. **IF ON SKIN:** Wash thoroughly with plenty of soap and water. If irritation develops, get medical attention. **IF SWALLOWED:** Do not induce vomiting. Dilute by giving 2 glasses of water to drink. Call a physician. Do not induce vomiting or give anything by mouth to an unconscious person. **IF INHALED:** Move victim to fresh air. **NOTE TO PHYSICIAN:** Contains petroleum distillates. Aspiration hazard may contraindicate the use of gastric lavage.

**PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS****WARNING**

Causes substantial but temporary eye injury and skin irritation. Do not get in eyes, on skin, or on clothing. This material may be harmful if swallowed.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as Barrier Laminate or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standards (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS****Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

This product is highly toxic to aquatic invertebrates, aquatic plants, wildlife and fish. Use with care when applying in areas frequented by wildlife or adjacent to any body of water or wetland area. Do not apply when weather conditions favor drift or erosion from target areas.

**PHYSICAL OR CHEMICAL HAZARDS****Combustible.**

Do not use or store near heat or open flame.

**ACTIVE INGREDIENT****Oxyfluorfen**

2-chloro-1-(3-ethoxy-4-nitrophenoxy)-

4-(trifluoromethyl) benzene .....19.4%\*

**INERT INGREDIENTS** .....80.6%

**TOTAL** 100.0%

\*Equivalent to 1.6 lbs. active ingredient per gallon.

EPA Reg. No. 707-174

**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 responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of **24** hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as Barrier Laminate or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

- Keep unprotected persons out of treated area until sprays have dried.

**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.**

**CHEMIGATION**

Do not apply this product through any type of irrigation system.

**GENERAL USE INFORMATION**

Unless otherwise directed by registered supplemental labeling, follow the Directions for Use in each crop group section.

**CULTURAL CONSIDERATIONS**

In order for GOAL T/O herbicide to provide maximum preemergence activity:

Prior to application, the bed or soil surface should be smooth and free of crop and weed trash (decaying leaves, clippings, dead weeds, etc.). Leaves and trash may be removed by blowing the area to be treated or by thoroughly mixing the trash into the soil through cultivation prior to herbicide application.

After application, at least one-quarter inch ( $\frac{1}{4}$  inch) of irrigation or rainfall should occur within 3 or 4 weeks after application. The best results from GOAL T/O herbicide are from applications to established beds or soil surfaces that are left undisturbed during the time period for which weed control is desired. Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of GOAL T/O herbicide. Cutting water furrows or cultivations that mix untreated soil into treated areas will also reduce the effectiveness of the treatment.

## 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 herbicides to the spray tank. The order of addition to the spray tank should be wettable powders first, flowables second and liquids last. Complete filling of the spray tank with water.

For all applications of GOAL T/O herbicide where postemergence weed control is desired, add 2 to 4 pints of an 80% active nonionic surfactant cleared for application to growing crops per each 100 gallons of spray. The addition of 4 pints of an 80% active nonionic surfactant per 100 gallons of spray is recommended to enhance postemergence activity when hard water (greater than 600 ppm) is used as the carrier. Maintain agitation until spraying is completed.

Spray equipment should be calibrated carefully before each use.

Dosages listed on this label are for broadcast application. For banded application, the amount of T/O herbicide used per acre should be reduced according to the following formula:

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

## CONIFER SEEDBEDS, TRANSPLANTS AND CONTAINER STOCK

### GENERAL INFORMATION

GOAL T/O herbicide is effective as a preemergence and/or postemergence herbicide for the control of certain annual grassy and broadleaf weeds in conifer seedbeds, transplant and container stock. The most effective postemergence weed control is achieved when GOAL T/O herbicide is applied to seedling weeds less than 4 inches in height. Preemergence control is most effective when spray is applied to clean, weed-free soil surfaces. Treated soil surfaces should not be disturbed as the herbicidal effectiveness of GOAL T/O herbicide may be decreased. Seedling weeds are controlled during emergence as they come in contact with the soil-applied herbicide.

**IMPORTANT:** Some varieties or cultivars of conifers and ornamental species listed may be susceptible to GOAL T/O herbicide. Care should be taken to ensure that the particular variety to be sprayed with GOAL T/O herbicide is tolerant. It is suggested that unfamiliar species be tested in limited areas prior to application for preemergence and postemergence weed control.

### WEEDS CONTROLLED

When GOAL T/O herbicide is applied preemergence or postemergence at recommended dosages and weed stages, the following grasses and broadleaf weeds are controlled.

*BARNYARDGRASS	<i>Echinochloa crus-galli</i>
BEDSTRAW, CATCHWEED	<i>Galium aparine</i>
BITTERCRESS, LESSER	<i>Cardamine oligosperma</i>
*BLUEGRASS, ANNUAL	<i>Poa annua</i>
BUCKWHEAT, WILD	<i>Polygonum convolvulus</i>
BURCLOVER	<i>Medicago, hipida</i>
CARPETWEED	<i>Mollugo verticillata</i>
*CLOVER, RED	<i>Trifolium pratense</i>
*CLOVER, WHITE	<i>Trifolium repens</i>
COCKLEBUR, COMMON	<i>Xanthium pensylvanicum</i>
*CRABGRASS, LARGE	<i>Digitaria sanguinalis</i>
*FIDDLENECK, COAST	<i>Amsinckia intermedia</i>
FILAREE, BROADLEAF	<i>Erodium botrys</i>
FILAREE, REDSTEM	<i>Erodium cicutarium</i>
FIREWEED (FROM SEED)	<i>Epilobium angustifolium</i>
FLIXWEED	<i>Descurainia sophia</i>
*FOXTAIL, GIANT	<i>Setaria faberi</i>
*GOOSEGRASS	<i>Eleusine indica</i>
GROUNDCHERRY, CUTLEAF	<i>Physalis angulata</i>
GROUNDCHERRY, WRIGHT	<i>Physalis wrightii</i>
GROUNDSEL, COMMON	<i>Senecio vulgaris</i>
HENBIT	<i>Lamium amplexicaule</i>
JIMSONWEED	<i>Datura stramonium</i>
KNOTWEED, PROSTRATE	<i>Polygonum aviculare</i>
LADYSTHUMB	<i>Polygonum persicaria</i>
LAMBSQUARTERS, COMMON	<i>Chenopodium album</i>
LETTUCE, PRICKLY	<i>Lactuca serriola</i>
MALLOW, LITTLE	<i>Malva parviflora</i>
MAYWEED	<i>Anthemis cotula</i>
MINERSLETTUCE	<i>Montia perfoliata</i>
*MORNINGGLORY, IVYLEAF	<i>Ipomoea species</i>
MORNINGGLORY, TALL	<i>Ipomoea purpurea</i>
MUSTARD, BLUE	<i>Chorispora tenella</i>
MUSTARD, TUMBLE	<i>Sisymbrium altissimum</i>
MUSTARD, WILD	<i>Brassica kaber</i>
NETTLE, BURNING	<i>Urtica urens</i>
NIGHTSHADE, BLACK	<i>Solanum nigrum</i>
NIGHTSHADE, HAIRY	<i>Solanum sarachoides</i>
OATS, WILD	<i>Avena fatua</i>
ORACH, RED	<i>Atriplex rosea</i>
PEPPERWEED, YELLOWFLOWER	<i>Lepidium perfoliatum</i>
PIGWEEED, PROSTRATE	<i>Amaranthus blitoides</i>
PIGWEEED, REDROOT	<i>Amaranthus retroflexus</i>
PIMPERNEL, SCARLET	<i>Anagallis arvensis</i>
PURSLANE, COMMON	<i>Portulaca oleracea</i>

REDMAIDS  
ROCKET, LONDON  
SANDSPURRY, RED  
\*SHEPHERDSPURSE  
SIDA, PRICKLY  
SMARTWEED, PENNSYLVANIA  
SORREL, RED (FROM SEED)  
SOWTHISTLE, ANNUAL  
SPEEDWELL, BIRDSEYE  
\*\*SPURGE, PROSTRATE  
\*\*SPURGE, SPOTTED  
SPURRY, CORN  
TANSYMUSTARD  
\*\*THISTLE, BULL  
THISTLE, RUSSIAN  
VELVETLEAF  
WITCHGRASS  
\*\*WOODSORREL, YELLOW

*Calandrinia caulescens*  
*Sisymbrium irio*  
*Spergularia rubra*  
*Capsella bursa-pastoris*  
*Sida spinosa*  
*Polygonum pensylvanicum*  
*Rumex acetosella*  
*Sonchus oleraceus*  
*Veronica persica*  
*Euphorbia supina*  
*Euphorbia maculata*  
*Spergula arvensis*  
*Descurainia pinnata*  
*Cirsium vulgare*  
*Salsola kali*  
*Abutilon theophrasti*  
*Panicum capillare*  
*Oxalis stricta*

\*Highest rate and/or multiple applications may be required for acceptable control.

\*\*Preemergence control only.

GOAL T/O herbicide is most effective when applied preemergence to annual grasses. Postemergence applications should be made to seedling grasses not exceeding the 2-leaf stage. The addition of 0.25% (2 pints/100 gallons of spray solution) of an 80% active nonionic surfactant, cleared for application on growing crops, enhances the GOAL T/O herbicide activity on emerged weeds.

### CONIFER SEEDBEDS

To assist in the establishment of conifer seedbeds, a preemergence application should be made after seeding but prior to conifer emergence. Postemergence applications should not be made until a minimum of 5 weeks after emergence of the conifer seedlings. Additional care should be taken if cool, cloudy weather occurs during emergence to make certain that seedlings have hardened off prior to spraying.

Conifers are tolerant to preemergence and postemergence applications of GOAL T/O herbicide. Applied postemergence, GOAL T/O herbicide will provide both postemergence and residual preemergence control of many broadleaf weeds and annual grass species.

### CONIFER SPECIES

GOAL T/O herbicide may be applied to conifer seedbeds of numerous species including the following:

<b>DOUGLAS FIR</b>	<i>Pseudotsuga menziesii</i>
<b>FIR</b>	
FRASER	<i>Abies fraseri</i>
GRAND	<i>Abies grandis</i>
NOBLE	<i>Abies procera</i>
<b>HEMLOCK</b>	
EASTERN HEMLOCK	<i>Tsuga canadensis</i>
<b>PINE</b>	
AUSTRIAN	<i>Pinus nigra</i>
EASTERN WHITE	<i>Pinus strobus</i>
HIMALAYAN	<i>Pinus wallichiana</i>
JACK	<i>Pinus banksiana</i>
LOBLOLLY	<i>Pinus taeda</i>
LOGEPOLE	<i>Pinus contorta</i>
LONGLEAF	<i>Pinus palustris</i>
MONTEREY	<i>Pinus radiata</i>
MUGHO	<i>Pinus mugo</i>
PONDEROSA	<i>Pinus ponderosa</i>
SCOTCH	<i>Pinus sylvestris</i>
SHORTLEAF	<i>Pinus echinata</i>
SLASH	<i>Pinus elliotii</i>
VIRGINIA	<i>Pinus virginiana</i>
<b>SPRUCE</b>	
BLUE	<i>Picea pungens</i>
DWARF ALBERTA	<i>Picea glauca conica</i>
NORWAY	<i>Picea abies</i>
SITKA	<i>Picea sitchensis</i>

### PREEMERGENCE DOSAGE

Apply 1.25 to 5 pints (0.25 to 1.0 lb. active) of GOAL T/O herbicide per broadcast acre as a preemergence application. Where grassy weeds are present, a minimum rate of 2.5 pints (0.5 lbs. active) of GOAL T/O herbicide per broadcast acre is suggested. In known areas of high weed competition, 5 pints (1.0 lb. active) of GOAL T/O herbicide per broadcast acre are recommended.

### TIMING AND METHOD OF APPLICATION

Apply recommended dosage after seeding but prior to conifer emergence. GOAL T/O herbicide should be thoroughly mixed with clean water at recommended concentration and applied at 20 to 40 psi in a minimum of 20 gallons of water per treated acre. Broadcast to beds and irrigate prior to weed emergence with 1/2 to 3/4 inch of sprinkler irrigation.

### POSTEMERGENCE DOSAGE

Apply 1.25 to 2.5 pints (0.25 to 0.5 lbs. active) of GOAL T/O herbicide per broadcast acre with each postemergence application. Two or three postemergence applications may be necessary for season-long weed control.

## TIMING AND METHOD OF APPLICATION

Apply recommended dosage to seedbeds no sooner than 5 weeks after emergence of conifer seedlings. Additional care should be taken if cool, cloudy weather occurs during emergence to make certain that seedlings have hardened off prior to spraying. Application should be made to seedling weeds (less than 4 inches in height). GOAL T/O herbicide should be thoroughly mixed with clean water at recommended concentration and applied as a broadcast application at 20 to 40 psi in a minimum of 20 gallons of water per treated acre.

## CONIFER TRANSPLANTS AND CONTAINER STOCK (INCLUDES 2-0 SEEDLING AND CHRISTMAS TREE PLANTINGS)

Many container-grown conifers and conifer transplants are tolerant to preemergence and postemergence applications of GOAL T/O herbicide. Applied postemergence, GOAL T/O herbicide will provide both postemergence and preemergence control of many broadleaf weeds and grasses. Postemergence applications should be applied before bud break or after foliage has had an opportunity to harden off. Conifers may be transplanted from seedbeds and sprayed directly providing bud break has not occurred.

The following conifer species, in addition to species listed under the CONIFER SEEDBED section, have been shown to be tolerant to GOAL T/O herbicide.

<b>ARBORVITAE</b> <i>Thuja occidentalis</i> <i>Thuja orientalis</i>	<b>RED CEDAR</b> <i>Juniperus virginiana</i>
<b>JUNIPER</b> <i>Juniperus chinensis</i> <i>Juniperus horizontalis</i> <i>Juniperus procumbens</i> <i>Juniperus sabinna</i> <i>Juniperus scopulorum</i>	<b>WESTERN HEMLOCK</b> <i>Tsuga heterophylla</i>  <b>YEW</b> <i>Taxus species</i>

## DOSAGE

For preemergence or postemergence weed control apply 5 to 10 pints (1.0 to 2.0 lbs. active) of GOAL T/O herbicide per broadcast acre.

## TIMING AND METHOD OF APPLICATION

For optimum weed control, preemergence applications should be made immediately after transplanting seedlings or to weed-free container stock. Postemergence applications should be made to weeds less than 4 inches in height. Two applications may be necessary, in fall-transplanted conifer fields, for season-long weed control. The addition of 0.25% (2 pints/100 gals. of spray solution) of an 80% active nonionic surfactant, cleared for application to growing crops, enhances GOAL T/O herbicide activity on emerged weeds. GOAL T/O herbicide must be applied only to conifer transplants prior to bud break or after foliage has had an opportunity to harden off. Thoroughly mix with clean water at recommended concentration and apply at 20 to 40 psi in a minimum of 20 gallons of water per treated acre. Spray over the top of transplants. Heavy rainfall immediately following application to emerged weeds may reduce effectiveness.

## VANTAGE® HERBICIDE TANK MIX IN CONIFER PLANTATIONS

FOR USE ONLY IN THE STATES OF ALABAMA, GEORGIA, KENTUCKY, NORTH CAROLINA, SOUTH CAROLINA, TENNESSEE, VIRGINIA AND WEST VIRGINIA

### GENERAL INFORMATION

GOAL T/O is effective as a preemergence and/or postemergence herbicide for the control of certain annual grassy and broadleaf weeds in conifer plantations.

The tank mix of GOAL T/O herbicide with Vantage will provide additional control of certain annual and perennial grass weeds (see Vantage label for weeds).

The following plants are tolerant to a tank mix of GOAL T/O herbicide plus Vantage:

COMMON NAME	SCIENTIFIC NAME
FIR, FRASER	<i>Abies fraseri</i>
*HEMLOCK, CANADA	<i>Tsuga canadensis</i>
PINE, VIRGINIA	<i>Pinus virginiana</i>
PINE, WHITE	<i>Pinus strobus</i>
SPRUCE, NORWAY	<i>Picea abies</i>

\*Canada Hemlock has a prolonged period of bud break and new growth, thus, directed applications are recommended during this period.

Broadleaf weeds controlled: See GOAL T/O herbicide label.

Grasses controlled: See Vantage herbicide label.

GOAL T/O herbicide and Vantage rates: A maximum of 10 pints per acre per season of GOAL T/O herbicide may be tank mixed with Vantage. A maximum of 2.5 pints of Vantage may be tank mixed with GOAL T/O herbicide.

See GOAL T/O herbicide label for minimum recommended rates of GOAL T/O herbicide and see Vantage label for minimum recommended rates of Vantage. Two or three applications may be needed for season-long control. In some cases, reduced grass control with Vantage may be experienced when tank mixed with GOAL T/O herbicide.

## TIMING

Applications should be made when weeds are actively growing but before conifer bud break or after conifer foliage has had an opportunity to harden off. Broadleaf weeds must be within the height limitations indicated on the GOAL T/O herbicide label.

## METHOD OF APPLICATION

Fill the spray tank at least one-third full of clean water and add the recommended amounts of GOAL T/O herbicide and Vantage while the pump and agitator are running. Complete filling of the spray tank with water. Apply at 20 to 40 psi in a minimum of 20 gallons of water per treated acre. Heavy rainfall immediately following application to emerged weeds may reduce effectiveness.

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

## CONIFER – SPECIFIC USE RESTRICTIONS

- 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.
- NOT FOR CONIFER RELEASE IN FOREST MANAGEMENT PROGRAMS OR FOR FOREST REGENERATION APPLICATIONS.
- Do not apply GOAL T/O herbicide in an enclosed greenhouse structure as injury to plant foliage may result.
- Do not store or transport treated container stock in an enclosed structure until completion of 4 irrigations (minimum 21 days) as injury to non-labeled plants may occur.
- Always apply GOAL T/O herbicide only to healthy conifer stock. Do not apply GOAL T/O herbicide to conifers that are under stress from excessive fertilizer or soil salts, disease, nematodes, frost, drought, flooding, previously applied pesticides, soil insects, or winter injury, as severe injury may result.

## GENERAL USE RESTRICTIONS

- Do not contaminate irrigation water or water used for domestic purposes.
- Do not use any plants treated with GOAL T/O herbicide for feed or forage.
- Do not feed or allow animals to graze on any areas treated with GOAL T/O herbicide.
- GOAL T/O 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 non-target areas. GOAL T/O 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 T/O herbicide remaining in spray equipment may damage other crops. To assist removal of GOAL T/O herbicide residues in spray equipment, an 80% active nonionic surfactant may be added at the rate of 1 quart per 100 gallons of water during flushing.
- Use GOAL T/O herbicide only for recommended purposes and at recommended rates.
- Do not treat ditch banks or waterways with GOAL T/O 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.

**SUPPLEMENTAL LABELING INFORMATION  
FOR DISTRIBUTION AND USE ONLY WITHIN CALIFORNIA**

**WEED CONTROL FOR NON-CROP USE IN THE STATE OF CALIFORNIA**

**GOAL<sup>®</sup> T/O HERBICIDE**

EPA SLN NO. CA-830065

**DIRECTIONS FOR USE**

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

**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. If the Conditions of Sale and Warranty are not acceptable, return the product unopened within thirty days of purchase to the place of purchase.

**GENERAL INFORMATION**

GOAL T/O herbicide provides postemergence and preemergence control of many susceptible weeds on non-crop areas including fence rows, storage yards, levee banks (use only on the side of levee away from water channels), roadsides, farmsteads and other similar non-crop locations.

This pesticide is toxic to wildlife and fish. Use with care when applying in areas frequented by wildlife or adjacent to any body of water. Refer to container label for additional handling and use warnings.

**GOAL T/O HERBICIDE USED ALONE**

**DOSAGE**

GOAL T/O herbicide is recommended for postemergence and preemergence control of susceptible weed species. GOAL T/O herbicide is recommended for postemergence control at 2.5 to 10 pints (0.5 to 2.0 lbs. active) per broadcast acre. The lower rate is recommended for the control of susceptible weeds in the early postemergence stage, less than 4 inches in height. The higher rate (2.0 lbs. active) should be used for weeds less than 12 inches in height. For preemergence control of susceptible weeds, GOAL T/O herbicide is recommended at 10 pints (2.0 lbs. active) per broadcast acre.

**WEEDS CONTROLLED POSTEMERGENCE**

Cheeseweed ( <i>Malva</i> )	<i>Malva parviflora</i>
Fiddleneck, Coast	<i>Amsinckia intermedia</i>
Filaree, Broadleaf	<i>Erodium botrys</i>
Filaree, Redstem	<i>Erodium cicutarium</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Minerslettuce	<i>Montia perfoliata</i>
Nettle, Burning	<i>Urtica urens</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Redmaids	<i>Calandrinia caulescens</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>

**WEEDS CONTROLLED PREEMERGENCE**

Burclover	<i>Medicago hipida</i>
Cheeseweed ( <i>Malva</i> )	<i>Malva parviflora</i>
Fiddleneck, Coast	<i>Amsinckia intermedia</i>
Filaree, Broadleaf	<i>Erodium botrys</i>
Filaree, Redstem	<i>Erodium cicutarium</i>
Groundsel, Common	<i>Senecio vulgaris</i>
Henbit	<i>Lamium amplexicaule</i>
Knotweed, Prostrate	<i>Polygonum aviculare</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Lettuce, Prickly	<i>Lactuca serriola</i>
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Purslane, Common	<i>Portulaca oleracea</i>
Redmaids	<i>Calandrinia caulescens</i>
Rocket, London	<i>Sisymbrium irio</i>
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Sowthistle, Annual	<i>Sonchus oleraceus</i>

**WEED STAGE**

Early Postemergence  
(weeds up to 4 inches high)

**GOAL T/O  
HERBICIDE RATE  
(PER BROADCAST ACRE)**  
2.5 pints (0.5 lbs. active)

**WEEDS  
CONTROLLED**

Cheeseweed (*Malva*); Fiddleneck, Coast;  
Henbit; Redmaids; Shepherdspurse

Postemergence  
(weeds up to 8 inches high)

5 pints (1.0 lb. active)

Cheeseweed (*Malva*); Fiddleneck, Coast;  
Henbit; Minerslettuce; Nettle, Burning;  
Redmaids; Shepherdspurse; Sowthistle,  
Annual

Late Postemergence  
(weeds up to 12 inches high)

10 pints (2.0 lbs. active)

Cheeseweed (*Malva*); Fiddleneck, Coast;  
Filaree, Broadleaf\*; Filaree, Redstem\*;  
Groundsel, Common; Henbit; Minerslet-  
tuce; Nettle, Burning; Pigweed, Redroot;  
Redmaids; Shepherdspurse; Sowthistle,  
Annual

Preemergence

10 pints (2.0 lbs. active)

Burclover; Cheeseweed (*Malva*); Fiddle-  
neck, Coast; Filaree, Broadleaf; Filaree,  
Redstem; Groundsel, Common; Henbit;  
Knotweed, Prostrate; Lambsquarters,  
Common; Lettuce, Prickly; Pigweed,  
Redroot; Purslane, Common; Redmaids;  
Rocket, London; Shepherdspurse;  
Sowthistle, Annual

\*GOAL T/O herbicide at the 10-pint rate (2.0 lbs. active) will provide control of filaree not exceeding the 4-inch stage. Applications to filaree beyond the 4-inch stage may result in partial control.

## METHOD OF APPLICATION

GOAL T/O herbicide should be applied in a minimum of 40 gallons of water per acre. Best preemergence results are achieved when spray is applied to a relatively weed-free soil surface. The volume of water used should be increased as the weeds become taller and more dense. Use a low-pressure sprayer equipped with flat fan nozzles. Spray equipment should be calibrated carefully before each use.

## SPRAY VOLUME:

WEED STAGE	GALLONS OF WATER PER ACRE
Early Postemergence (weeds up to 4 inches high)	40 or more
Postemergence (weeds up to 8 inches high)	100 or more
Late Postemergence (weeds up to 12 inches high)	100 or more
Preemergence	40 or more

## MIXING DIRECTIONS

### HAND-HELD EQUIPMENT

For control of susceptible weeds listed on this label using knapsack or hand-held sprayers.

When application will be made in limited areas, it is expected that hand-held sprayers will be used. In those situations, mix 3 tablespoons (1.5 fluid ounces) of GOAL T/O herbicide per gallon of water and apply on a spray-to-wet basis. Spray coverage should be uniform and complete. Avoid spraying to runoff. When spraying to control weeds on a preemergence basis, 1 gallon of spray mixture should cover 400 sq. ft. It is recommended that an 80% active nonionic surfactant be added to the spray mixture at a rate of 1 tablespoon (0.5 fluid ounces) per 1 gallon of spray.

### LOW-PRESSURE SPRAYER

Fill the spray tank at least one-third full of clean water and add the recommended amount of GOAL T/O herbicide while the pump and agitator are running. Complete filling of the spray tank with water and then add 1 quart of an 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 order to provide maximum effectiveness of preemergence activity of GOAL T/O herbicide, the soil surface should be smooth and free of weed trash (decaying leaves, dead weeds, etc.).

For acceptable preemergence activity, at least one-quarter inch ( $\frac{1}{4}$  inch) of water or rainfall is necessary within 3 to 4 weeks after application. Cultural practices that result in redistribution or disturbance of the soil surface after treatment will decrease the herbicidal effectiveness of GOAL T/O herbicide. The best results from GOAL T/O herbicide are from applications to soil surfaces that are left undisturbed during the time period for which weed control is desired.

For postemergence control of grass species, a tank mixture of GOAL T/O herbicide with paraquat or Roundup® is recommended. Preemergence control of additional weed species can be obtained when tank mixed with simazine or Karmex®. When tank mixing, read and observe all individual manufacturers' label directions before using. In interpreting all labels for the tank mixture, the most restrictive situations must apply.

## USE PRECAUTIONS

- Follow General Use Restrictions listed on the GOAL T/O herbicide label.
- Do not treat ditchbanks or waterways with GOAL T/O herbicide.
- CHEMIGATION: Do not apply this product through any type of irrigation system.

All applicable directions, restrictions and precautions on the EPA-registered label are to be followed.

This labeling must be in the possession of the user at the time of application.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**STORAGE:** Keep from freezing. Store above 32°F.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER DISPOSAL

**Plastic Containers:** Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**Metal Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Ventilate area. Avoid breathing vapors. Use MSHA/NIOSH self-contained breathing apparatus or air-line respirator for large spills in confined areas. Dike the spill with inert material (sand, earth, etc.) and transfer the liquid or solid diking material to separate containers for recovery or disposal. Remove contaminated clothing promptly and wash exposed skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and bodies of water.

GOAL is a registered trademark of Rohm and Haas Company.

Karmex is a registered trademark of E. I. duPont de Nemours & Company.

Roundup is a registered trademark of Monsanto Company.

Vantage is a registered trademark of BASF-AG Corp.

13521-B4

MADE IN U.S.A.

ROHM AND HAAS COMPANY, 100 INDEPENDENCE MALL WEST, PHILADELPHIA, PA 19106-2399 TEL.: (215) 592-3000

# GOAL® T/O HERBICIDE

MANUFACTURER  
ROHM AND HAAS COMPANY

100 Independence Mall West  
Philadelphia, PA 19106-2399

EMERGENCY TELEPHONE NUMBERS:

HEALTH EMERGENCY: 215-592-3000

SPILL EMERGENCY: 215-592-3000

CHEMTREC: 800-424-9300

## PRODUCT IDENTIFICATION

GOAL® T/O Herbicide  
Product Code: 62757  
Key: 893541-4  
MSDS Date: 04/22/93  
Supersedes: 07/25/91

Rohm and Haas Hazard Rating	Scale
Toxicity 3	4=EXTREME
Fire 2	3=HIGH
Reactivity 0	2=MODERATE
Special -	1=SLIGHT
	0=INSIGNIFICANT

## \*\*\*COMPONENT INFORMATION

No.	CAS REG NO.	AMT. (%)
1	Oxyfluorfen 42874-03-3	20-21
2	Xylene 1330-20-7	9-10
3	Ethylbenzene 100-41-4	1-2
4	Cyclohexanone 108-94-1	19-21
5	Related reaction products	None 49-51
6	Surfactant mixture	Undisclosed
7	Solvent naphtha, petroleum, light arom	64742-95-6

## EMERGENCY RESPONSE INFORMATION

### FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.

**Eye Contact:** IMMEDIATELY flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention.

**\*\*\*Skin Contact:** IMMEDIATELY get under a safety shower. Wash affected skin areas thoroughly with soap and water. Remove and wash contaminated clothing thoroughly. Do not take clothing home to be laundered. Get prompt medical attention.

**\*\*\*Ingestion:** If swallowed, give 2 glasses of water to drink. Never give anything by mouth to an unconscious person. DO NOT induce vomiting, petroleum distillate present. IMMEDIATELY see a physician. Careful gastric lavage may be indicated.

### Note to Physician:

Exposure to xylene can affect the CNS, pulmonary, cardiovascular, and gastrointestinal systems. Liver enzymes, EKG, serum electrolytes, and a chest X-ray should be done in cases of massive exposure.

Direct toxic effects from cyclohexanone ingestion are dose related. Conditions to be alerted to in case of excessive ingestion are hepatomegaly, hepatic necrosis, renal failure, coagulation abnormalities, and seizures. Liver dysfunction is likely within a short time if the person is symptomatic (i.e. nausea, vomiting). Decontamination of the gut is appropriate after significant ingestion.

In acute cases of naphtha overexposure or ingestion, patients should be evaluated for signs of respiratory distress.

## FIRE FIGHTING INFORMATION

**Unusual Hazards:** Pesticide particulates can become airborne.

Combustion generates toxic fumes of the following:  
- hydrogen chloride

- hydrogen fluoride
- nitrogen oxides

**Extinguishing Agents:** Use the following extinguishing media when fighting fires involving this material:

- carbon dioxide
- dry chemical
- water spray
- polar solvent (alcohol) foam

**Personal Protective Equipment:** Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.

**Special Procedures:** Contain runoff. Remain upwind. Avoid breathing smoke. Use water spray to cool containers exposed to fire.

## SPILL OR LEAK HANDLING INFORMATION

**Personal Protection:** Appropriate protective equipment must be worn when handling a spill of this material. See the **PERSONAL PROTECTION MEASURES** Section for recommendations. If exposed to material during clean-up operations, see the **FIRST AID PROCEDURES** Section for actions to follow. Remove all contaminated clothing promptly. Wash all exposed skin areas with soap and water immediately after exposure. Thoroughly launder clothing before reuse. Do not take clothing home to be laundered.

**Procedures:** Eliminate all ignition sources. Ventilate the spill area. Avoid breathing vapor. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. See the **REGULATORY INFORMATION** Section for reporting requirements.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**NOTE:** Spills on porous surfaces can contaminate groundwater.

## HAZARD INFORMATION

### HEALTH EFFECTS FROM OVEREXPOSURE

**Primary Routes of Exposure:** Inhalation, Dermal Absorption, Skin Contact, Eye Contact, Ingestion

**Inhalation:** Inhalation of solvent vapor or mist can cause the following: - irritation of nose, throat, and lungs

- headache
- nausea
- dizziness
- drowsiness
- loss of coordination
- stupor
- unconsciousness

**Eye Contact:** Direct contact with material can cause the following:

- severe irritation
- possibly permanent injury

**\*\*\*Skin Contact:** The solvent(s) in this material can be absorbed through intact skin. Material can cause the following:

- severe skin irritation
- Prolonged or repeated skin contact can cause the following:
  - defatting and drying of the skin which can lead to irritation and dermatitis

**Ingestion:** Material is possibly harmful if swallowed.

### \*\*\*Delayed Effects:

Repeated overexposure to the active ingredient in this material can cause the following:

- liver damage
- Prolonged or repeated overexposure to xylene can cause the following:
  - reversible liver impairment
  - reversible kidney impairment
- Prolonged or repeated overexposure to cyclohexanone can cause the following:
  - liver damage
  - kidney damage
- Prolonged or repeated overexposure to naphtha can cause the following:
  - liver damage
  - kidney damage

## FIRE AND EXPLOSIVE PROPERTIES

**Flash Point:** 40 °C/104 °F Setalash Closed Cup

**Auto-ignition Temperature:** 423 °C/793 °F Cyclohexanone

**Lower Explosive Limit:** 1.0% Xylene  
**Upper Explosive Limit:** 8.1% Cyclohexanone

## REACTIVITY INFORMATION

**Instability:** This material is considered stable. However, avoid contact with ignition sources (e.g. sparks, open flame, heated surfaces).

**Hazardous Decomposition Products:** Thermal decomposition may yield the following:

- hydrogen chloride
- hydrogen fluoride

**Hazardous Polymerization:** Product will not undergo polymerization.

**Incompatibility:** Avoid contact with the following:

- acids
- bases
- amines
- oxidizing agents
- halogens
- molten sulfur

## ENVIRONMENTAL IMPACT

### Environmental Toxicity

Bobwhite quail, Acute Oral LD<sub>50</sub>: >2150 mg/kg

Bobwhite quail, 8 Day Oral LC<sub>50</sub>: >5000 mg/kg

Mallard duck, 8 Day Oral LC<sub>50</sub>: >5000 mg/kg

Bluegill sunfish (Lepomis macrochirus), 96 Hour LC<sub>50</sub>: 0.2 mg/l

Rainbow trout (Salmo gairdneri), 96 Hour LC<sub>50</sub>: 0.41 mg/l

Channel catfish (Ictalurus punctatus), 96 Hour LC<sub>50</sub>: 0.4 mg/l

Grass shrimp, 96 Hour LC<sub>50</sub>: 32 ug/l

Eastern oyster, 96 Hour EC<sub>50</sub>: 95 ug/l

Fiddler crab (Uca pugilator), 96 Hour LC<sub>50</sub>: >1000 mg/l

Freshwater clam, 96 Hour LC<sub>50</sub>: 9.6 mg/l

Honeybee, 96 Hour LC<sub>50</sub>: >10000 ppm

The above Environmental Toxicity data are from studies conducted on the technical material, 70-75% active ingredient.

## ACCIDENT PREVENTION INFORMATION

### COMPONENT EXPOSURE INFORMATION

#### Component Information

No.	CAS REG NO.	AMT. (%)
1	Oxyfluorfen 42874-03-3	20-21
2	Xylene 1330-20-7	9-10
3	Ethylbenzene 100-41-4	1-2
4	Cyclohexanone 108-94-1	19-21
5	Related reaction products	None 49-51
6	Anionic/nonionic surfactant mixture	Undisclosed
7	Solvent naphtha, petroleum, light arom	64742-95-6

### Exposure Limit Information

Com- ponent No. Units	ROHM AND HAAS		OSHA		ACGIH	
	TWA	STEL	TWA	STEL	TLV	STEL
1 mg/m <sup>3</sup>	0.2	1.6	None	None	None	None
2 ppm	50 Skin	75 Skin	100	150	100	150
3 ppm	50	75	100	125	100	125
4 ppm	25 Skin	75 Skin	25 Skin	None	25 Skin	None
5	None	None	None	None	None	None
6	None	None	None	None	None	None
7 ppm	50	75	None	None	None	None

## PERSONAL PROTECTION MEASURES

**Respiratory Protection:** A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentration are maintained below the TWA/TLV's listed in the COMPONENT EXPOSURE INFORMATION Section.

Up to 10 times the TWA/TLV: Wear a MSHA/NIOSH approved (or equivalent) half-mask, air-purifying respirator.

Up to 1000 ppm organic vapor: Wear a MSHA/NIOSH approved (or equivalent) full-facepiece, air-purifying respirator.

Above 1000 ppm organic vapor or Unknown: Wear a MSHA/NIOSH approved (or equivalent) self-contained breathing apparatus in the positive pressure mode, OR,

MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Air-purifying respirators should be equipped with pesticide cartridge (organic vapor cartridge and pesticide prefilter).

**Eye Protection:** Use chemical splash goggles (ANSI Z87.1 or approved equivalent).

**Hand Protection:** Glove permeation data does not exist for this material. The following glove(s) should be used for splash protection only: - Nitrile  
Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Rinse and remove gloves immediately after use. Wash hands with soap and water.

**Other Protection:** Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

#### FACILITY CONTROL MEASURES

**Ventilation:** Use explosion proof local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of *Industrial Ventilation: A Manual of Recommended Practice* published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**Other Protective Equipment:** Facilities storing or utilizing this material should be equipped with an eye-wash facility and a safety shower.

#### STORAGE AND HANDLING INFORMATION

**Storage Conditions:** The minimum recommended storage temperature for this material is 0°C/32°F.

Do not store this material near food, feed, or drinking water. Store away from excessive heat (e.g. steam pipes, radiators), from sources of ignition and from reactive materials. Avoid all ignition sources. Ground all metal containers during storage and handling.

**Handling Procedures:** Do not handle material near food, feed, or drinking water. Ground all containers when transferring material. This material is a severe irritant. See the PERSONAL PROTECTION MEASURES Section prior to handling.

**Other:** CONTAINERS HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue (vapors and/or liquid) follow all MSDS and label warnings even after container is emptied. Residual vapors in empty containers may explode on ignition. DO NOT cut, drill, grind, or weld on or near container. Triple rinse (or equivalent) and puncture empty container. Dispose empty container in a sanitary landfill or by incineration as allowed by state and local authorities. Avoid inhalation of smoke if incinerated.

#### SUPPLEMENTAL INFORMATION

##### TYPICAL PHYSICAL PROPERTIES

**Appearance:** Opaque

**Color:** Dark colored

**State:** Liquid

**Odor Characteristic:** Aromatic odor

**pH:** 7.0

**Viscosity:** 0.51 CPS

**Specific Gravity (Water = 1):** 0.992

**Vapor Density (Air = 1):** 21.9

**Vapor Pressure:** 4.0 mm Hg @ 20°C/68°F

**Melting Point:** No Data

**Boiling Point:** 139°-156°C/282°-313°F

**Solubility in Water:** Dispersible

**Percent Volatility:** 45-80%

**Evaporation Rate (Bac = 1):** <1

#### TOXICITY INFORMATION

#### Acute Data:

**Oral LD<sub>50</sub>- rat:** >500 mg/kg

**Dermal LD<sub>50</sub>- rabbit:** >5000 mg/kg

**Eye Irritation - rabbit:** severe irritation

**Skin Irritation - rabbit:** severe irritation

Toxicity data for a compositionally similar material are listed below.

**Inhalation LC<sub>50</sub>- rat:** >22.64 mg/l for 4 hr

**Subchronic/Chronic Data:** The following data pertains to studies conducted with the technical material, 70-75% active ingredient:

Liver necrosis was observed in mice at 20 ppm and above; the overall NOEL was 2 ppm (0.3 mg/kg) in mice.

**Carcinogenicity Data:** The following data pertains to studies conducted with the technical material, 70-75% active ingredient:

No evidence of carcinogenicity was observed in long-term studies with rats. A slightly higher incidence (not statistically significant) of liver tumors was seen in male mice at 200 ppm but not at 20 or 2 ppm, and not in female mice at any of these doses. GOAL® Technical has been classified as a possible human carcinogen by the US-EPA.

**Mutagenicity Data:** The following data pertains to studies conducted with the technical material, 70-75% active ingredient:

Ames mutagenicity: Positive

**Mouse Lymphoma Point Mutation:** Positive

In vitro rat hepatocyte Unscheduled DNA Synthesis: Negative

In vivo cytogenetic assay (rat): Negative

In vivo chromosome aberration assay (mouse bone marrow cells): Negative

**Reproductive/Teratology Data:** The following data pertains to studies conducted with the technical material, 70-75% active ingredient:

No evidence of teratogenicity was observed in studies with rabbits.

GOAL® Technical was not teratogenic or embryofetotoxic in rats at doses that were not maternally toxic (15 mg/kg), however at maternally toxic doses (150 mg/kg) embryofetotoxicity and skeletal malformations were evident. No effects on reproductive performance in rats was evident at doses up to and including 400 ppm.

**Sensitization Data:** The following data pertains to studies conducted with the technical material, 70-75% active ingredient:

**Sensitization - human:** No allergic response observed.

**Delayed Contact Hypersensitivity - guinea pig:** No allergic response observed.

#### WASTE DISPOSAL

**Procedure:** Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

#### REGULATORY INFORMATION

##### WORKPLACE CLASSIFICATIONS

This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200). This product is subject to regulation under the Canadian Pest Control Products Act (P.C.P. Act). Therefore, this product is excluded from the supplier labeling and material safety data sheet requirements as specified in Section 12 of the Hazardous Products Act.

##### TRANSPORTATION CLASSIFICATIONS

**US DOT Hazard Class:** NONREGULATED

This classification is used when shipping in non-bulk packages for domestic surface transportation only. Exceptions in CFR 49 Parts 171-177 may apply. Consult CFR 49 Parts 171-177 to determine appropriate classification when shipping in bulk packages or when shipping by air or ocean.

##### EMERGENCY PLANNING & COMMUNITY RIGHT-TO-KNOW (SARA TITLE 3)

**Section 311/312 Categorizations (40CFR 370):** This product is a hazardous chemical under 29CFR 1910.1200, and is categorized as an immediate and delayed health, and flammability physical hazard.

**Section 313 Information (40CFR 372):** This product contains a chemical which is listed in Section 313

at or above *de minimis* concentrations. The following listed chemicals are present: (Quantity present is found elsewhere on this MSDS.)

- Xylene (mixed isomers) (1330-20-7)

- Ethylbenzene (100-41-4)

#### CERCLA INFORMATION (40CFR 302.4)

This material has a component or components with a reportable quantity under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304. The components, CAS numbers, and reportable quantities are listed below. Spills of a component in excess of its reportable quantity must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations.

Xylene (1330-20-7) 1000 lbs.

Cyclohexanone (108-94-1) 5000 lbs.

Ethylbenzene (100-41-4) 1000 lbs.

#### RCRA INFORMATION

When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste with the characteristic of ignitability, hazardous waste number: D001

#### CHEMICAL CONTROL LAW STATUS

This product is subject to regulation under the U.S. Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and is therefore exempt from U.S. Toxic Substances Control Act (TSCA) inventory listing requirements.

GOAL® is a trademark of Rohm and Haas Company or one of its subsidiaries or affiliates.

#### ABBREVIATIONS:

ACGIH = American Conference of Governmental Industrial Hygienists

OSHA = Occupational Safety and Health Administration

TLV = Threshold Limit Value

PEL = Permissible Exposure Limit

TWA = Time Weighted Average

STEL = Short-Term Exposure Limit

BAC = Butyl acetate

\*\*\* denotes a revision from previous MSDS in this area.

The information contained herein relates only to the specific material identified. Rohm and Haas Company believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, express or implied, is made as to the accuracy, reliability, or completeness of the information. Rohm and Haas Company urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

89