

TREFLAN* E.C.

WEED AND GRASS PREVENTER

A selective preemergence herbicide for the control of annual grasses and broadleaf weeds in nursery stock, ornamental trees, ornamental woody shrubs, ornamental groundcovers, roses, established flowers, vegetable gardens and under paved surfaces.

Active Ingredient:

Trifluralin: (α,α,α-trifluoro-2,6-dinitro-N,N,-	dipropyl-p-toluidine) 43%
Inert Ingredients:	57%
Total:	
Contains petroleum distillates. Contains 4 por	unds active ingredient per gallon
EPA Reg. No. 17545-9	EPA Est. No. 48498-CA-1

*Trademark of DowAgroSciences LLC

Manufactured for:

MONTEREY CHEMICAL COMPANY

P. O. Box 35000 • Fresno, CA 93745 • (559) 499-2100

CAUTION / PRECAUCION:

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.)

FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on skin or clothing: Take off contaminated clothing, Rinse skin immediately wash with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: This product contains an aromatic hydrocarbon and can be extremely harmful if swallowed. Aspiration of this product may produce a severe pneumonitis. Stomach lavage with a cuffed endotracheal tube in place and immediate administration of activated charcoal, 6-8 heaping teaspoonfuls with water, should be considered. Treatment is otherwise symptomatic and supportive.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Avoid contact with eyes, skin or clothing.

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 selections chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Nitrile, Butyl, Neoprene or Barrier Laminate
- Shoes plus socks

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.

Engineering Controls Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (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.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oyster. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply in a manner that will directly expose canals, takes, streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use Carefully before applying. 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's 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 of 12 hours.

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated areas if there will be no contact with anything that has been treated.

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:

• Coveralis • Chemical-resistant gloves such as Nitrile, Butyl, Neoprene or Barrier Laminate • Shoes plus socks

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 tarms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area unitial sprays have dried.

GENERAL INFORMATION

TREFLAN E.C. is a selective preemergence herbicide for the control of annual grasses and broadleaf weeds in nursery stock, ornamental trees, ornamental woody shrubs, ornamental groundcovers, roses, established flowers, vegetable gardens and under paved surfaces.

TREFLAN E.C. is incorporated (mixed) into the soil to provide long-lasting control of annual grasses and broadleaf weeds (see list below). TREFLAN E.C. controls weeds by killing their seeds as they germinate. It does not control established weeds.

Incorporation of TREFLAN E.C. helps assure effective weed control regardless of weather conditions and permits shallow cultivation, rotary hoeing and hand hoeing without reducing its weed control activity.

TREFLAN E.C. is recommended for use on a wide variety of vegetables, ornamental trees, ornamental groundcovers, shrubs and flowers. The omamental species on which TREFLAN E.C. can be used at recommended rates without damage include those listed in this label under "Approved Ornamental Species."

GENERAL USE PRECAUTIONS

Applied according to directions and under normal growing conditions, TREFLAN E.C. will not harm the treated crop. Over application may result in crop injury or a soil residue. Uneven application or improper soil incorporation of TREFLAN E.C. can result in erratic weed control or crop injury. Seedling disease, cold weather, deep planting, excessive moisture, high salt concentration or drought may weaken crop seedlings and increase the possibility of damage from TREFLAN E.C. Under these conditions, delayed crop development or reduced yields may result.

Do not aerially apply TREFLAN E.C.

Do not apply TREFLAN E.C. through any type of irrigation system.

GRASSES CONTROLLED BY TREFLAN E.C.

Annual bluegrass, Barnyardgrass (Watergrass), Brachiaria, Bromegrass, Cheat, Crabgrassès, Foxtail, Johnsongrass (from seed), Junglerice, Panicum (Fall), Panicum (Texas), Sandbur, Sprangletop, Stinkgrass, Woolly cupgrass.

BROADLEAF WEEDS CONTROLLED BY TREFLAN E.C.

Carpetweed, Chickweed, Florida pusley, Goosefoot, Knotweed, Kochia, Lambsquarters, Pigweed, Puncturevine (Western U.S. only), Purslane, Russian thistle, Stinging nettle.

Note: TREFLAN E.C. will not control certain resistant weeds such as Cocklebur, Velvetleaf, Jimsonweed, Ragweed, Venice Mallow and Nutgrass.

ORNAMENTALS

APPLICATION DIRECTIONS FOR SOIL INCORPORATION

TREFLAN E.C. is to be mixed with water and applied as a spray before, or in the same operation as soil incorporation. Apply in 5 to 40 gallons of water er acre (broadcast basis) using any properly calibrated low-pressure boomtype herbicide sprayer that will uniformly apply the spray. Pour the recommended amount of TREFLAN E.C. for your soil type into the spray tank during the filling operation and mix thoroughly before spraying. Do not apply more than the recommended amount.

SOIL INCORPORATION DIRECTIONS

TREFLAN E.C. must be incorporated into the soil after application to prevent loss of its activity. Spraying and incorporation should be done in the same operation, if possible. Incorporation may be delayed up to 24 hours after application. Variable weed control may result from delayed incorporation if TREFLAN E.C. is applied to a wet, warm soil surface or if the wind velocity is 10 mph or higher.

The machinery used for incorporation should break up large clods and mix TREFLAN E.C. thoroughly with the soil. The more thoroughly TREFLAN E.C. is mixed with the soil, the more consistent the weed control will be.

Apply and incorporate TREFLAN E.C. prior to planting new nursery stock liners, ornamentals, trees and woody shrubs, and gladioli. (Gladioli corms less than 1 inch in diameter may be injured by pre-plant applications of TREFLAN E.C.) TREFLAN E.C. may also be applied to established plantings by using a directed spray to the soil between the rows and beneath the plants.

Incorporation Before Planting (Pre-plant): Thorough incorporation may be achieved with the following:

- P.T.O.-driven equipment (tillers, cultivators, hoes) set to cut 2 to 3 inches deep with rotors spaced to provide a clean sweep of the soil;
- Double disc (or double disc with spike tooth harrow in tandem) set to cut 3 to 4 inches deep and operated in two different directions (cross disced) at 4 to 6 mph;

- Mulch treader and other similar disc-type implements set to cut 3 to 4 inches deep and operated twice at 5 to 8 mph;
- Rolling cultivators set to cut 2 to 4 inches deep and operated twice at 6 to 8 mph; or
- 5) **Bed conditioner** (Do-All) set to cut 2 to 4 inches deep and operated at 4 to 6 mph.

Incorporation After Planting (Post-plant): Incorporation may be achieved around established plants by using:

- 1) P.T.O.-driven equipment (tillers, cultivators, hoes) set to cut 2 to 3 inches deep with rotors spaced to provide a clean sweep of the soil;
- 2) Rolling cultivators set to cut 2 to 4 inches deep and operated twice at 6 to 8 mph. When incorporating TREFLAN E.C. in transplants, new liners, or established plants, the implement should be adjusted so that treated soil is thrown forward and around the plants in a row.

Clean cultivate area to be treated before application since TREFLAN E.C. will not control established weeds. Shallow incorporation with implements set to cut soil less than 2 inches deep may result in erratic weed control. Do not use spike tooth or spring tooth harrows alone for incorporation.

Broadcast (Overall) Application Rates for Soil Incorporation Only

Coarse Soils Sand and sandy loam	1 pint per acre (½ pound of active ingredient)	
Medium Solls Loam, silt loam and silt	1½ pints per acre (¾ pound of active ingredient)	
Fine Soils Clay loam, silty clay and clay	2 pints per acre (1 pound of active ingredient)	

For band applications, use the following formula to figure the proportionate amount:

band width in inches row width in inches x recommended broadcast rate

amount to apply per acre on band

TREFLAN E.C. is not recommended on muck soils.

SURFACE APPLICATION AND WATER INCORPORATION DIRECTIONS

Apply 1 gallon of TREFLAN E.C. per acre or 3 ounces per 1,000 square feet in sufficient water for thorough coverage. Use any properly calibrated low pressure sprayer that will uniformly apply the spray mixture. Add TREFLAN E.C. to clean water in the spray tank during the filling operation. Agitate thoroughly prior to spraying. A one-half inch rain or its equivalent in sprinkler irrigation must be received within 24 hours or poor weed control will result.

APPROVED ORNAMENTAL SPECIES

Woody Shrubs

Andromeda, Japanese	Cotoneaster, zabel	Lilac, common
Arborvitae, American	Deutzia	Mock orange
Aza!ea	Elaeagnus, silverberry	Pittosporum Japanese
Barberry, Japanese	Euonymus, spreading	Privet
Barberry, mento	Euonymus, winged	Redcedar, eastern
Boxwood, common	Euonymus, winter creeper	Rhododendron
Boxwood, Harlands	Firethorn	Spiraea, vanhoutte
Boxwood, littleleaf	Forsythia	Viburnum
Camellia, Japanese	Guava, pineapple	Weigela
Camellia, Sasangua	Hawthorn, India	Willow
Cherrylaurel, American	Holly	Yew, anglojap
Cinquefoil	Honeysuckle	Yew, Japanese
Cleyera, Japanese	Juniper	Yewpine
Cotoneaster, cranberry	Laurel, mountain	•

<u>Trees</u>

Almond	Hemlock, Canada	Pine Japanese black
Apple, Crabapple	Honey locust	Pine, lubiolly
Apricot	Larch, Japanese	Pine, red
Ash, white	Locust, black	Pine, scotch
Baid cypress	Maple, Norway	Planetree, London
Birch, European white	Maple, red	Plum
Black gum	Maple, silve,	Redbild, Eastern
Cherry	Maple, sugar	Spruce, Colorado
Chestnut, Chinese	Oak, pin	Spruce, Norway
Cottonwood	Oak, red	Spruce, white
Dogwood, flowering	Oak, scarlet	Sweat gum
Dogwood, kousa	Peach	Sycomore
Douglas fir	Pine, Austrian	Tulip free
Fir, balsam	Pine, Eastern white	Walnut, black

Groundcover Plantings

Germander Rupturewort Aaronsbeard Ice plant, largeleaf Bellflower, Adriatic Snow-in-Summer Beilflower, Poscharsky Ivy, Algerian Speedwell Ceanothus lvy, English St. Johnswort Lily-of-the-Nile Coreopsis Stonecrop (Sedum) Lilyturf, bigblue Strawberry, beach Cotoneaster Marigold Thrift Coyote brush Myoporum Verbena Crown vetch Plumbago, dwarf Wirevine, creeping Daisy, trailing African Rockrose Yarrow, woolly Fern, asparagus Rosemary Zovsiagrass Gazania

Roses and Other Established Flowers

African daisy Four O'Clock Poppy, California Portulaça Aster (perennial) Gallardia Balsam Gladiolus Rose Blackeyed Susan Golden glow Salvia Shasta daisy Calendula Impatiens Snapdragon Carnation Ixora Snow-on-the-Mountain Centaurea, velvet Lobelia Chrysanthemum Lupine Stock Sunflower Marigold Coreopsis Cornflower Marigold, cape Sweet alyssum Sweet pea Morning glory Cosmos Dahlia Nasturtium Sweet sultan Sweet William Dianthus Nicotiana Vinca **Dusty Miller** Petunia rioss flower Yarrow Phlox Forget-me-not Pincushion flower Zinnia

FIELD GROWN ROSES

TREFLAN E.C. may be applied as an incorporated treatment at a rate of 2 quarts per acre to field grown roses to control annual weeds listed on this label. Apply to the soil surface in 5 to 40 gallons of finished spray and incorporate within 24 hours. Use a directed spray if application is made when roses are actively growing. Set incorporation equipment to avoid damage to root systems of established roses.

Do not apply more than 2 quarts (2 pounds a.i.) per acre per year.

VEGETABLE GARDENS

SOIL PREPARATION

Crop Residues or Existing Weeds: Crop residues or existing weeds can interfere with the mixing of TREFLAN E.C. into the soil. A manageable leve? of such residues would allow the TREFLAN E.C. to be uniformly mixed into the top 2 to 3 inches of soil. If the level of the crop residue is such that this cannot be done, you must till the soil prior to application.

Soil Texture Guide: The amount of TREFLAN E.C. you apply will vary with the oil texture to be treated. A fine textured soil will require more TREFLAN E.C. than a coarse soil. Choose the proper rate for each application based on the following soil texture group and specific crop recommendations. Do not exceed recommended rates.

Soil Texture	Soil Classification	
Coarse Soils (Light)	Sands, loamy sands, sandy loams	
Medium Soils	Silt or loam	
Fine Soils (Heavy)	Clay loams, silty clay loams, clays, silty clays	

MIXING DIRECTIONS

Start with a clean spray tank. Fill sprayer 1/2 full with clean water. Add correct quantity of TREFLAN E.C. Close the sprayer and shake well to mix TREFLAN E.C. Finish filling sprayer and shake occasionally to keep TREFLAN E.C. mixed in the tank.

GROUND APPLICATION

Apply TREFLAN E.C. in 1 to 5 gallons of water per 1,000 square feet on a broadcast basis. Spray uniformly over the top of the soil surface to assure satisfactory weed control.

INCORPORATION DIRECTIONS

Mix TREFLAN E.C. thoroughly into the soil with a tool or implement that breaks up large clods and distributes the chemical within the soil. The more thoroughly the TREFLAN E.C. is mixed within the soil, the more consistent the weed control. Thoroughly mix TREFLAN E.C. in the top 2 to 3 inches of the final seedbed

(when the garden is ready for planting) or erratic weed control and/or crop injury may result. Equipment such as a rototiller or rake should be used to mix TREFLAN E.C. to the desired 2 to 3 inch depth.

Incorporation Before Planting: TREFLAN E.C. must be mixed into the soil within 24 hours after application. You should mix the TREFLAN E.C. uniformly into the top 2 to 3 inches of the final seedbed.

Incorporation After Planting: Check specific crop incorporation directions after planting.

Cultivation After Planting: Soil treated with TREFLAN E.C. may be shallow cultivated without reducing the weed control activity of TREFLAN E.C. Do not cultivate deeper than the treated soil since this may bring untreated soil to the surface, and poor weed control may result.

CROP RECOMMENDATIONS

These recommendations are given as broadcast rates of TREFLAN E.C. per 1,000 square feet. Apply any time after January 1 when the soil can be worked and is suitable for good incorporation. Do not use TREFLAN E.C. on soils containing more than 10% organic matter. TREFLAN E.C. should not be used in areas to be planted with sweet corn or direct seed cucurbits.

For the Crops Listed Below, Use the Following Broadcast Rates per 1,000 Square Feet. Apply and incorporate TREFLAN E.C. before planting, at planting or immediately after planting unless otherwise indicated.

Soil Texture	Teaspoons of TREFLAN E.C.	
Coarse	2 1/4	
Medium	3 1/3	
Fine	4 1/2	

rille	7 116
CROPS	DIRECTIONS
Asparagus — Established	Follow recommended soil preparation, application and incorporation procedures for TREFLAN E.C. TREFLAN E.C. can be applied to established asparagus as a single application. Apply TREFLAN E.C. to asparagus after ferns are removed but before speak emergence.
Carrot	
Celery — Direct seeded and transplant	
Cole Crops — Transplant (Broccoli, Brussels Sprout, Cabbage and Cauliflower)	Apply and incorporate prior to transplanting only.
Cucurbits — Postplant Emerged (Cantaloupe, Cucumber and Watermelon)	Apply TREFLAN E.C. as a direct spray to the soil between the rows and beneath the plants which are in the 3 to 4 true leaf stage. After applying Treflan E.C. to the soil incorporation is necessary to mix the chemical to the 2-3 inch desired depth. Optimum weed control will be achieved by moving a portion of the treated soil around the base of the established plants.
Okra	
Pepper — Transplant	Apply and incorporate prior to transplanting only.
Potatoes — (All states except Maine)	Apply and incorporate TREFLAN E.C. after planting, before emergence, or immediately following dragoff or after the potato plants have fully emerged. Mix.TREFLAN E.C. into the soil so a uniform layer of areated soil covers the bed. Concentrated areas of chemical in the bed may retard potato emerged and cause stem brittleness. If potato plants are already emerged when cultivating, do not totally cover ioliging with treated soil. Do no damage potato seed pipoes or elongating sprouts with incorporation equipment.
Southern Pea	Apply and incorporate before planting only.
Tomato — Transplant	Apply and incorporate prior to transplanting only.

For the Crops Listed Below, Use the Following Broadcast Rates per 1,000 Square Feet. Apply and incorporate TREFLAN E.C. before planting.

Soil Texture	Teaspoons of TREFLAN E.C.
Coarse	2 1/4
Medium	2 1/4
Fine	3 1/3

CROPS	
Beans — Lima Bean and Snap Bean	
Cole Crops — Direct seeded (Broccoli, Brussels S Cauliflower). See previous section for transplant dire	
Greens — Turnip Greens, Collard, Kale and Mustard	Greens
Green Pea	

UNDER PAVED SURFACES

Directions for Use and Site Preparation

TREFLAN E.C. should be used only where the soil to be treated has been prepared according to good construction practices. If rhizomes, stolons, tubers or other vegetative plant parts are present in the site, they should be removed by scalping with a grader blade to a depth sufficient to insure their complete removal.

Application should be made after the final road bed is established or after the pase rock has been added. Do not move soil after application of TREFLAN E.C. and do not apply TREFLAN E.C. to soil where asphalt is to be applied directly on top of the treated soil.

Paving should occur as soon as possible after application of TREFLAN E.C.

Application Directions

Large Areas: Apply 3-4 gallons of TREFLAN E.C. per acre in sufficient water to insure thorough wetting of the soil surface or penetration of the spray solution through the base rock layer. A minimum of 150 gallons per acre is recommended. Apply uniformly with a ground sprayer. Add TREFLAN E.C. to clean water during filling of the spray tank. Agitate before spraying.

Small Areas: Apply 9-12 fl. oz. of TREFLAN E.C. per 1,000 sq.ft. using sufficient water for thorough coverage. A hand sprayer or sprinkling can may be used. Before application determine the amount of water and TREFLAN E.C. necessary to uniformly cover the area to be treated. Shake or stir the spray solution prior to application.

TREFLAN E.C. RATE CONVERSION CHART

Rate Per 1,000 Square Feet to Rate Per Acre		
Rate Per 1,000 Square Feet (Teaspoons)	Rate Per Acre (Pints)	
2 1/4	. 1	
3 1/3	1 1/2	
4 1/2	2	

SMALL SPRAYER CALIBRATION TECHNIQUE

Small sprayer calibration can be achieved by following these five simple steps:

- 1. Fill the sprayer full of clean water.
- Spray as you would normally apply chemicals through the sprayer over the area to be treated.
- When the sprayer is empty, measure the area treated to determine the number of square feet per sprayer load.
- After you have calculated the number of square feet per sprayer load, calculate the amount of TREFLAN E.C. needed to treat that size area.
- 5. Refer to the mixing directions on the TREFLAN E.C. product label.

STORAGE AND DISPOSAL

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

Storage: Store in original container only. Avoid freezing. Store above 40°F. If frozen, poor weed control may result. Do not store near heat or open flame. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent) during mixing and loading. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state or local ACRC recycler, visit the ACRC web page at www.acrecycle.org. Decontaminated containers may also be disposed of in a sanitary landfill.

CONDITIONS OF SALE AND WARRANTY

Monterey Chemical Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated when used in accordance with the use directions under normal conditions. Monterey Chemical Company neither makes, nor authorizes any agent or representative to make, any other warranties, express or implied, including fitness or merchantability.

The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as timing and method of application, weather and crop conditions, presence of other materials, or other influencing factors, all of which are beyond the control of Monterey Chemical Company and Seller. Buyer and user acknowledge and assume all risks and liability resulting from the handling, storage and use of this material not in strict accordance with directions given herewith. In no case shall Monterey Chemical Company or the Seller be liable for consequential, special, indirect, or incidental damages or losses resulting from the handling or use of this product. The foregoing is a condition of sale by Monterey Chemical Company and is accepted as such by the Buyer.

ACCEPTED

MAY 4 2004

Under the Hederal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 17545-9