

# Treflan\* E.C.

Weed and Grass Preventer

EPA Reg. No. 62719-97

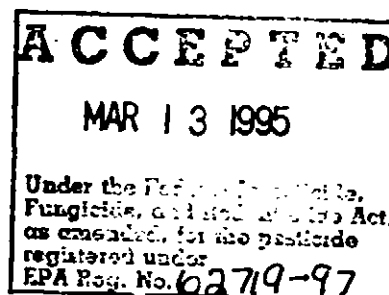
Proposed Label Amendment: Current label text based on EPA-accepted copy dated 02/03/88 and EPA-accepted WPS revisions dated 01/27/93.

## Proposed Amendment(s):

1. Application on field grown roses at 2 quarts per acre as an incorporated treatment added to ornamental uses for this product. This use was previously approved in the state of California as SLN CA-770532.
2. Added "Total ..... 100.0% to ingredients statement.
3. Minor editing to correct spelling errors, punctuation, correct use of w/l case and use of trademarks.

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[Editor's note: Added text is underlined.]



1 of 18

[Editor's note: Added text is underlined.]

[Laminated Booklet -- Treflan EC (Specialty, -97)]

(Logo) DowElanco

## Treflan\* E.C.

### Weed and Grass Preventer

A selective preemergence herbicide for use in ornamentals and vegetable gardens for the control of annual grasses and broadleaf weeds.

**Active Ingredient:**

trifluralin: $\alpha,\alpha,\alpha$ -trifluoro-2,6-dinitro- <i>N,N</i> -dipropyl- <i>p</i> -toluidine	44.5%
Inert Ingredients	55.5%
Total	100.0%

Contains 4 pounds active ingredient per gallon.

Manufactured using the processes of U.S. Patents 4,120,905 and 4,226,789.

**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.)

#### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), Engineering Controls Statements and User Safety Recommendations, and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" in the label booklet.

In case of an emergency endangering health or the environment involving this product, call collect 517-636-4400.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

**Avoid Freezing -- Store Above 40°F.**

EPA Reg. No. 62719-97

EPA Est. 1471-IN-2

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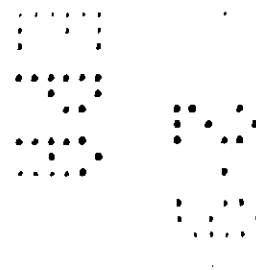
DowElanco • Indianapolis, IN 46268 U.S.A.

**Specialty Herbicide**

Net Contents 1 gal

(Page 2 of Datapak)

Table of Contents	Page
Precautionary Statements	
Hazards to Humans and Domestic Animals	
Personal Protective Equipment	
Use Safety Recommendations	
First Aid	
Environmental Hazards	
Directions for Use	
Agricultural Use Requirements	
Storage and Disposal	
General Information	
General Use Precautions	
Grasses Controlled by Treflan E.C.	
Broadleaf Weeds Controlled by Treflan E.C.	
Ornamentals	
Application Directions	
Incorporation Directions	
Surface Application and Water Incorporation to Ornamental Groundcover Plantings	
Application Rate	
Ornamental Species	
Woody Shrubs	
Trees	
Groundcover Plantings	
Roses and Other Established Flowers	
Under Paved Surfaces	
Directions for Use and Site Preparation	
Application Directions	
Vegetable Gardens	
Soil Preparation	
Soil Texture Guide	
Mixing Directions	
Ground Application	
Incorporation Directions	
Cultivation After Planting	
Crop Recommendations	
Warranty Disclaimer	
Inherent Risks of Use	
Limitation of Remedies	
Crops Index	



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**Precautionary Statements**

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**Hazards to Humans and Domestic Animals****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.)

**Causes Substantial But Temporary Eye Injury • Causes Skin Irritation • Harmful If Swallowed Or Absorbed Through The Skin • Trellan E.C. May Cause Skin Sensitization Reactions In Certain Individuals**

**Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist.**

**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 Barrier Laminate or Viton
- Shoes plus socks
- Protective eyewear

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, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protections 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.

**First Aid**

**If in eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. See an ophthalmologist or physician immediately.

**If swallowed:** Call a physician or Poison Control Center. This product contains an aromatic hydrocarbon and can be extremely harmful if swallowed. If this happens and the patient is conscious, immediately administer activated charcoal (six to eight heaping teaspoons) with water and get medical attention.

**If on skin:** Immediately wash with plenty of soap and water. Get medical attention if irritation develops.

**If inhaled:** Remove individual to fresh air. If breathing difficulty occurs, get medical attention. If not breathing, provide cardiopulmonary resuscitation assistance (mouth-to-mouth) and call a physician.

**Environmental Hazards**

This pesticide is toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring aquatic sites. Do not contaminate water by cleaning of equipment or disposal of wastes.

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**Directions for Use**

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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.

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

**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 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 area 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:

- Coveralls
- Chemical-resistant gloves such as Barrier Laminate or Viton
- Shoes plus socks
- Protective eyewear

**Storage and Disposal**

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

**Storage:** Avoid freezing. Store above 40° F. If frozen, poor weed control may result. Do not store near heat or open flame. Store in original container only. 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.

**Plastic Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Metal Container Disposal:** 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.

**Special Precaution:** Do not apply Treflan E.C. through any type of irrigation system.

### **General Information**

Treflan® E.C. is a preemergence herbicide which 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 ornamental species on which Treflan E.C. can be used at recommended rates without damage include those listed in this booklet under "Approved Ornamental Species" on page \_\_\_\_.

### **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.

### **Grasses Controlled by Treflan E.C.**

Annual bluegrass  
Barnyardgrass (Watergrass)  
Brachiaria  
Bromegrass  
Cheat  
Crabgrasses  
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

Treflan E.C. is to be mixed with water and applied as spray before, or in the same operation as soil incorporation. Apply in 5 to 40 gallons of water per acre (broadcast basis) using any properly calibrated low-pressure boom-type 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.

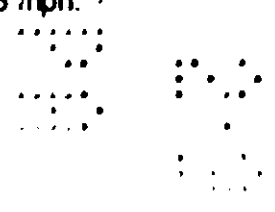
### Incorporation Directions

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 the 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:

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. **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.
3. **Mulch treader** and other similar disc-type implements set to cut 3 to 4 inches deep and operated twice at 5 to 8 mph.
4. **Rolling cultivators** set to cut 2 to 4 inches deep and operated twice at 6 to 8 mph.
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 less than 2 inches deep may result in erratic weed control. Do not use spike tooth or springtooth harrows alone for incorporation.

#### **Broadcast (Overall) Application Rates for Soil Incorporation Only**

Coarse Soils	Sand and sandy loam
	1 pint/acre (1/2 lb active)
Medium Soils	Loam, silt loam and silt
	1 1/2 pint/acre (3/4 lb active)
Fine Soils	Clay loam, silty clay and clay
	2 pint/acre (1 lb active)

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

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \frac{\text{recommended broadcast rate}}{\text{amount to apply per acre on band}}$$

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

#### **Ornamental Groundcover Plantings**

##### **Surface Application and Water Incorporation**

Add Treflan E.C. to clean water in the spray tank during the filling operation. Agitate thoroughly prior to spraying. Apply in 5 to 40 gallons of water per acre using any properly calibrated low pressure herbicide sprayer that will uniformly apply the spray mixture. A one-half inch rain or its equivalent in sprinkler irrigation must be received within 24 hours or poor weed control will result.

##### **Application Rates**

Apply 1 gallon of Treflan E.C. per acre or 3 ounces per 1,000 sq ft of groundcover area.



## Approved Ornamental Species

### Woody Shrubs

<u>Common Name</u>	<u>Scientific Name</u>
Andromeda, Japanese	<i>Pieris japonica</i>
Arborvitae, American	<i>Thuja occidentalis</i>
Azalea	<i>Rhododendron</i> spp.
Barberry, Japanese	<i>Berberis thunbergii</i>
Barberry, mento	<i>Berberis mentorensis</i>
Boxwood, common	<i>Buxus sempervirens</i>
Boxwood, harlands	<i>Buxus harlandi</i>
Boxwood, littleleaf	<i>Buxus microphylla</i>
Camellia, Japanese	<i>Camellia japonica</i>
Camellia, sasanqua	<i>Camellia sasanqua</i>
Cherrylaurel, American	<i>Prunus caroliniana</i>
Cinquefoil	<i>Potentilla</i> spp.
Cleyera, Japanese	<i>Cleyera japonica</i>
Cotoneaster, cranberry	<i>Cotoneaster apiculata</i>
Cotoneaster, zabel	<i>Cotoneaster zabelii</i>
Deutzia	<i>Deutzia</i> spp.
Elaeagnus, silverberry	<i>Elaeagnus pungens</i>
Euonymus, spreading	<i>Euonymus kiautschovica</i>
Euonymus, winged	<i>Euonymus alatus</i>
Euonymus, wintercreeper	<i>Euonymus fortunei</i>
Firethorn	<i>Pyracantha</i> spp.
Forsythia	<i>Forsythia</i> spp.
Guava, pineapple	<i>Feijoa sellowiana</i>
Hawthorn, India	<i>Rhamphiolepis indica</i>
Holly	<i>Ilex</i> spp.
Honeysuckle	<i>Lonicera</i> spp.
Juniper	<i>Juniperus</i> spp.
Laurel, mountain	<i>Kalmia latifolia</i>
Lilac, common	<i>Syringa vulgaris</i>
Mockorange	<i>Philadelphus</i> spp.
Pittosporum, Japanese	<i>Pittosporum tobira</i>
Privet	<i>Ligustrum</i> spp.
Redcedar, eastern	<i>Juniperus virginiana</i>
Rhododendron	<i>Rhododendron</i> spp.
Spiraea, vanhoutte	<i>Spiraea vanhouttei</i>
Viburnum	<i>Viburnum</i> spp.
Weigela	<i>Weigela</i> spp.
Willow	<i>Salix</i> spp.
Yew, anglojap	<i>Taxus media</i>
Yew, Japanese	<i>Taxus cuspidata</i>
Yewpine	<i>Podocarpus macrophyllus</i>

**Trees****Common Name**

Almond  
 Apple, Crabapple  
 Apricot  
 Ash, white  
 Baldcypress  
 Birch, european white  
 Blackgum  
 Cherry  
 Chestnut, Chinese  
 Cottonwood  
 Dogwood, flowering  
 Dogwood, kousa  
 Douglas fir  
 Fir, balsam  
 Hemlock, Canada  
 Honey locust  
 Larch, Japanese  
 Locust, black  
 Maple, Norway  
 Maple, red  
 Maple, silver  
 Maple, sugar  
 Oak, pin  
 Oak, red  
 Oak, scarlet  
 Peach  
 Pine, Austrian  
 Pine, eastern white  
 Pine, Japanese black  
 Pine, loblolly  
 Pine, red  
 Pine, scotch  
 Planetree, London  
 Plum  
 Redbud, eastern  
 Spruce, colorado  
 Spruce, Norway  
 Spruce, white  
 Sweetgum  
 Sycamore  
 Tuliptree  
 Walnut, black

**Scientific Name**

*Prunus dulcis*  
*Malus* spp.  
*Prunus armeniaca*  
*Fraxinus americana*  
*Taxodium distichum*  
*Betula pendula*  
*Nyssa sylvatica*  
*Prunus* spp.  
*Castanea mollissima*  
*Populus deltoides*  
*Cornus florida*  
*Cornus kousa*  
*Pseudotsuga menziesii*  
*Abies balsamea*  
*Tsuga canadensis*  
*Gleditsia triacanthos*  
*Larix kaempferi*  
*Robinia pseudoacacia*  
*Acer platanoides*  
*Acer rubrum*  
*Acer saccharinum*  
*Acer saccharum*  
*Quercus palustris*  
*Quercus rubra*  
*Quercus coccinea*  
*Prunus persica*  
*Pinus nigra*  
*Pinus strobus*  
*Pinus thunbergiana*  
*Pinus taeda*  
*Pinus resinosa*  
*Pinus sylvestris*  
*Platanus acerifolia*  
*Prunus* spp.  
*Cercis canadensis*  
*Picea pungens*  
*Picea abies*  
*Picea glauca*  
*Liquidambar styraciflua*  
*Platanus occidentalis*  
*Liriodendron tulipifera*  
*Juglans nigra*

**Groundcover Plantings****Common Name**

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

**Scientific Name**

*Hypericum calycinum*  
*Campanula elatines*  
*Campanula poscharskyana*  
*Ceanothus* spp.  
*Coreopsis* spp.  
*Cotoneaster* spp.  
*Baccharis pilularis*  
*Coronilla vana*  
*Osteospermum fruticosum*  
*Asparagus densiflorus*  
*Gazania* spp.  
*Teucrium chamaedrys*  
*Carpobrotus edulis*  
*Hedera canariensis*  
*Hedera helix*  
*Agapanthus* spp.  
*Liriope muscari*  
*Tagetes* spp.  
*Myoporum laetum*  
*Ceratostigma plumbaginoides*  
*Cistus* spp.  
*Rosmarinus officinalis*  
*Herniaria glabra*  
*Cerastium tomentosum*  
*Veronica* spp.  
*Hypericum coris*  
*Sedum* spp.  
*Fragaria chiloensis*  
*Armeria maritima*  
*Verbena* spp.  
*Muehlenbeckia axillaris*  
*Achillea tomentosa*  
*Zoysia tenuifolia*

**Roses and Other Established Flowers**

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

**Field Grown Roses**

Treflan Weed and Grass Preventer 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 lb a.i.) per acre per year.

**Under Paved Surfaces****Directions for Use and Site Preparation**

Treflan E.C. should be used only where the area 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.

Applications should be made only when the final grade is established or after additions of base rock. Do not move soils following Treflan E.C. application and do not apply Treflan E.C. to areas where asphalt is to be installed directly on top of soil.

Paving should follow Treflan E.C. applications as soon as possible.

**Application Directions**

**Large Areas:** Apply Treflan E.C. 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 with any sprayer that will apply the spray uniformly. Add the recommended amount of Treflan E.C. to clean water in the spray tank during the filling operation. Agitate before spraying.

**Small Areas:** For treating small areas, a tank type 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.

#### **The Proper Amount of Treflan E.C. to Apply**

	<b>Proper Amount of Treflan E.C.</b>
<b>Small Areas</b>	9 to 12 oz /1000 sq ft
<b>Large Areas</b>	3 to 4 gal/acre

### **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 level 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 soil 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.

<b>Soil Texture</b>	<b>Soil Classification</b>
<b>Course Soils (Light)</b>	Sands, loamy sands, sandy loams
<b>Medium Soils</b>	Silt or loam
<b>Fine Soils (Heavy)</b>	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 1000 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 1000 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 Following Crop Grouping, Use the Rate Listed Below:** Apply and incorporate Treflan E.C. before planting, at planting or immediately after planting unless otherwise indicated.

**Broadcast Rates Per 1,000 Square Feet**

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

**1. 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 spear emergence.

**2. Carrot****3. Celery - (Direct seeded and transplant)**

**4. Cole Crops - Transplant (Broccoli, Brussels Sprout, Cabbage and Cauliflower)**  
Apply and incorporate prior to transplanting only. See next section for direct seeded.

**5. 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.

**6. Okra****7. Pepper - Transplant**

Apply and incorporate prior to transplanting only.

**8. Potato - (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 treated soil covers the bed. Concentrated areas of chemical in the bed may retard potato emergence and cause stem brittleness. If potato plants are already emerged when cultivating, do not totally cover foliage with treated soil. Do not damage potato seed pieces or elongating sprouts with incorporation equipment.

**9. Southern Pea (Before planting only)**

**10. Tomato - Transplant**

Apply and incorporate prior to transplanting only.

For the Following Crop Grouping, Use the Rate Listed Below: Apply and incorporate Treflan E.C. before planting.

**Broadcast Rates Per 1,000 Square Feet**

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

1. Beans - (Lima Bean and Snap Bean)
2. Cole Crops - Direct Seeded (Broccoli, Brussels Sprout, Cabbage and Cauliflower)  
See above section for transplant.
3. Greens - (Turnip Greens, Collard, Kale and Mustard Greens)
4. Green Pea

**Treflan E.C. Rate Conversion Chart**

Rate Per 1,000 sq ft to Rate Per Acre	
Rate Per 1,000 sq ft:	Rate Per Acre:
(Teaspoons)	(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.
2. Spray as you would normally apply chemicals through the sprayer over the area to be treated.
3. When the sprayer is empty, measure the area treated to determine the number of square feet per sprayer load.
4. 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.

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**Warranty Disclaimer**

DowElanco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. DowElanco MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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**Inherent Risks of Use**

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by buyer.

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### Limitation of Remedies

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The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at DowElanco's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of DowElanco or the seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner

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### Crops Index

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<u>Crop</u>	<u>Page</u>
Asparagus (Established)	
Broccoli	
(Transplant)	
(Seeded)	
Brussels sprout	
(Transplant)	
(Seeded)	
Cabbage	
(Transplant)	
(Seeded)	
Cantaloupe	
Carrot	
Cauliflower	
(Transplant)	
(Seeded)	
Celery	
Collard	
Cucumber	
Green pea	
Kale	
Lima bean	
Mustard green	
Okra	
Pepper	
Potato	
Snap bean	
Southern pea	
Tomato	
Turnip green	
Watermelon	



[Base Label of Laminated Booklet -- Treflan E.C. (Specialty, -97)]

(logo) DowElanco

## Treflan\* E.C.

A selective preemergence herbicide for use in ornamentals and vegetable gardens for the control of annual grasses and broadleaf weeds

**Active Ingredient:**

trifluralin: $\alpha,\alpha,\alpha$ -trifluoro-2,6-dinitro- <i>N,N</i> -dipropyl- <i>p</i> -toluidine.....	44.5%
Inert Ingredients .....	55.5%
Total .....	100.0%

Contains 4 pounds active ingredient per gallon.

Manufactured using the processes of U.S. Patents 4,120,905 and 4,226,789.

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### Precautionary Statements

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#### Hazards to Humans and Domestic Animals

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.)

**Causes Substantial But Temporary Eye Injury • Causes Skin Irritation • Harmful If Swallowed Or Absorbed Through The Skin • Treflan E.C. May Cause Skin Sensitization Reactions In Certain Individuals**

Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist.

#### 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 Barrier Laminate or Viton
- Shoes plus socks
- Protective eyewear

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, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protections 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.

**First Aid**

**If in eyes:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. See an ophthalmologist or physician immediately.

**If swallowed:** Call a physician or Poison Control Center. This product contains an aromatic hydrocarbon and can be extremely harmful if swallowed. If this happens and the patient is conscious, immediately administer activated charcoal (six to eight heaping teaspoonsful) with water and get medical attention.

**If on skin:** Immediately wash with plenty of soap and water. Get medical attention if irritation develops.

**If inhaled:** Remove individual to fresh air. If breathing difficulty occurs, get medical attention. If not breathing, provide cardiopulmonary resuscitation assistance (mouth-to-mouth) and call a physician.

**Environmental Hazards**

This pesticide is toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treatment areas may be hazardous to aquatic organisms in neighboring aquatic sites. Do not contaminate water by cleaning of equipment or disposal of wastes.

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), Engineering Controls Statements and User Safety Recommendations, and Directions for Use including Storage and Disposal.

**Notice:** Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" in the label booklet.

In case of an emergency endangering health or the environment involving this product, call collect 517-636-4400.

**Agricultural Chemical:** Do not ship or store with food, feeds, drugs or clothing.

**Avoid Freezing -- Store Above 40°F.**

EPA Reg. No. 62719-97

EPA Est. 1471-IN-2

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DowElanco • Indianapolis, IN 46268 U.S.A.

**Specialty Herbicide**

**Net Contents 1 gal**

18