LABEL

DowElanco(TM)

Treflan\* E.C.

EASTERN CANADA AND BRITISH COLUMBIA

A Selective Liquid Herbicide for Preemergence Weed Control In Many Field Crops, Vegetables and Ornamentals

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

GUARANTEE: Trifluralin......400 grams per litre

REGISTRATION NO. 9257
PEST CONTROL PRODUCTS ACT

AGRICULTURAL

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 10 L HANDI-JUG\*

## **INSTRUCTIONS:**

FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. READ ALL DIRECTIONS CAREFULLY BEFORE APPLYING. THESE INSTRUCTIONS APPLY TO CROPS GROWN IN EASTERN CANADA AND BRITISH COLUMBIA ONLY.

# PRECAUTION:

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Do not store near heat or flame. Avoid contamination of foodstuffs, feed and fish ponds.

# FIRST AID:

In case of contact with eyes or skin, flush with water. Contact physician if swallowed. If swallowed, induce vomiting followed by at least 300 mL of water to children and 700 mL to adults. Make certain vomitus is not inhaled. After vomiting occurs, give 30-40 mL of activated charcoal in 100 mL of water.

#### ENVIRONMENTAL HAZARD

Direct contamination of any body of water with this product may kill fish. Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes.

DowElanco Canada Inc. 17705 Leslie Street Newmarket, Ontario L3Y 3E3 (416) 836-0436

\* Trademark of DowElanco

#### RINSE, DRAIN AND DISPOSAL PROCEDURE

- 1. Rinse the emptied container thoroughly and add rinsings to the spray mixture in the tank.
- 2. Follow Provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Do not reuse container.
- 4. Make the empty container unsuitable for further use and dispose in accordance with Provincial requirements.
- 5. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the regional office of Conservation and Protection, Environment Canada.

#### **STORAGE**

# DO NOT FREEZE.

Store TREFLAN E.C. in heated storage. Active ingredient crystallization may occur at temperatures below 5'C. If stored below 5'C, check for crystals in the bottom of each container. If crystals are present, place the container in a warm area (at least 15'C) for several hours. Agitate contents by inverting several times and return it to the upright position. After several hours, if any crystals remain, agitate or circulate container contents again.

# ENSURE ANY CRYSTALS ARE DISSOLVED BEFORE ADDING TO SPRAY TANK.

NOTICE TO USER: This control product is to be used only in accordance with the directions on this label. It is an offense under the Pest Control Products Act to use a control product under unsafe conditions.

NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and subject thereto, the buyer assumes the risk to persons or

property arising from the use or handling of this product and accepts the product on that condition.

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#### INSTRUCTIONS:

FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. READ ALL DIRECTIONS CAREFULLY BEFORE APPLYING.

## WARNING:

Do not apply TREFLAN E.C. to peat or muck soils.

Do not apply to wet soils, soils in poor working condition or soils which contain more than 15% organic matter.

Do not apply to soils subjected to prolonged periods of flooding.

CAUTION: Do not graze the treated crops or cut for hay; there are not sufficient data available to support such use.

TREFLAN E.C. may damage transplants weakened by any cause resulting in reduced crop yield. To prevent damage:

- 1. Plant only healthy transplants.
- 2. Do not plant when cool, wet or unfavourable growing conditions exist.
- 3. Follow application and incorporation directions exactly.

Applied and incorporated according to directions and under normal growing conditions, TREFLAN E.C. will not harm the treated crop. Seedling disease, cold weather, deep planting, excessive moisture, high salt concentration, or drought may weaken crop seedlings and increase the risk of damage from TREFLAN E.C. resulting in delayed crop development or reduced yields.

#### **STORAGE**

# DO NOT FREEZE.

Store TREFLAN E.C. in heated storage. Active ingredient crystallization may occur at temperatures below 5°C. If stored below 5°C, check for crystals in the bottom of each container. If crystals are present, place the container in a warm area (at least 15°C) for several hours. Agitate contents by inverting several times and return it to the upright position. After several hours, it any crystals remain, agitate or circulate container contents.

ENSURE ANY CRYSTALS ARE DISSOLVED BEFORE ADDING TO SPRAY TANK.

If stored below 18°C, bring the contents to 15°C for 24 hours and shake well before using.

TREFLAN E.C. is a preemergence herbicide which is mixed (incorporated) into the soil to provide long-lasting control of many annual grasses and broadleaf weeds. TREFLAN E.C. controls susceptible weeds by killing seedlings as they germinate. It does not control established weeds.

DIRECTIONS FOR USE ON OILSEED, VEGETABLE AND NURSERY CROPS IN EASTERN CANADA AND BRITISH COLUMBIA

#### LAND PREPARATION

(See below for weeds controlled and crops registered)

Cultivate to destroy existing weeds before TREFLAN E.C. application. When applying to stubble fields, chop and thoroughly mix crop residues into soil to a depth of 10-15 cm. Disc type implements provide the best results. Disc-type elements are preferred on stubble.

### APPLICATION

Add the recommended amount of TREFLAN E.C. to clean water in the spray tank during the filling operation and agitate thoroughly. Apply in at least 100 litres of water per hectare (broadcast basis) using any properly calibrated low-pressure herbicide sprayer that will apply the spray uniformly. Check the sprayer daily to ensure proper calibration and uniform application.

## WEEDS CONTROLLED

Annual Grasses Annual Broadleaves

Green and Yellow Foxtail Pigweed

Barnyard Grass Lambs-quarters

Crab Grass Russian Thistle

Brome Grass Chickweed

Cheat Purslane

Stink Grass Knotweed

Goose Grass Carpetweed

Annual Bluegrass

Wild Oats

Apply TREFLAN E.C. to soil surface and incorporate in the same operation if possible. Ensure that large clods are broken. Do not delay incorporation more than 24 hours after application. When applied as directed, TREFLAN E.C. will not harm crops that follow in rotation. However, an over application caused by overlapping, letting the sprayer run in one spot, improper calibration, non-uniform application, etc., may reduce stands of crops that follow in rotation.

#### INCORPORATION

To incorporate, work TREFLAN E.C. into the soil in two different directions. Use a tandem disc, discer or field (Vibrashank type) cultivator set to work 8-10 cm deep for the first incorporation. Disc or cultivate in a cross direction at the same depth. Operate disc implements at 7-10 km/h and cultivators at 10-13 km/h.

TREFLAN E.C. should not be incorporated with a field cultivator when the soil is crusted, lumpy, or too wet for good mixing action.

Incorporation with implements set to cut less than 8 cm deep or more than 10 cm deep may result in erratic weed control or crop damage.

Rod weeders, harrows, or hoe drills will not property incorporate TREFLAN E.C.

NOTE: When used as directed, TREFLAN E.C. will provide commercially acceptable control of the above weeds.

CROPS REGISTERED

Canola Carrots

Soybeans Black Beans

Mustard Alfalfa (Direct Seeded)

Dry Beans (White or Kidney) Turnips

Sunflower Transplants of Tomatoes,

Faba Beans Peppers, Brussels Sprouts,

Peas (Field & Canning)

Broccoli, Cabbage and

Crambe

Cauliflower

Snapbeans

Ornamentals (Woody Nursery Stock, Perennials)

Limabeans

Transplanted Shelterbelts

EASTERN CANADA & BRITISH COLUMBIA RECOMMENDED RATES OF TREFLAN E.C. PER HECTARE

	SOIL TEXTURE		
	Light	Medium	Heavy
	Sand Sandy loam	Loam Silt loam Silt Sandy Clay Loam	Silty Clay loam Clay loam Silty Clay Clay
Soybeans, Dry Beans (White or Kidney) Snapbeans, Carrots Faba Beans (Horsebeans) Apply and incorporate immediately prior to or up to 3 weeks before planting.	1.5L/ha	2.0L/ha	2.75L/ha
Direct-seeded: Cabbage, Cauliflower Alfalfa	1.5L/ha	2.0L/ha	2.75L/ha
Apply and incorporate immediately prior to or up to 3 weeks before planting. Direct-seeded cole crops have exhibited marginal tolerance to recommended rates of Treflan E.C. Stunting or reduced stand may occur.			
Turnips Mustard	Not Applicable	2.0L/ha	2.75L/ha
Apply and incorporate immediately prior to or up to 3 weeks before planting.			

Transplant: Tomatoes, Cauliflower, Peppers, Broccoli, Cabbage, Brussels sprouts  Apply and incorporate immediately prior to or up to 3 weeks before planting.	1.5L/ha	2.0L/ha	2.75L/ha
Lima Beans Peas (field and canning)  Apply and incorporate immediately prior to or up to 3 weeks before planting. Annual grass control only.	1.5L/ha	1.5L/ha	2.0L/ha
Ornamentals: Transplant Woody Nursery Stock & Perennials  Apply and incorporate immediately prior to or up to 3 weeks before planting.	1.5L/ha	2.0L/ha	2.75L/ha
Ornamentals: Established Woody Nursery Stock  Apply as directed spray to soil. Incorporate as closely as possible to plants without causing damage to roots.	1.5L/ha	2.0L/ha	2.75L/ha

TREFLAN should not be applied to ornamental ground covers such as Ajuga, Myrtle and Pachysandra, as injury may result.

NOTE: Do not delay incorporation more than 24 hours after applications.

SOYBEANS

TREFLAN E.C./Lexone<sup>1</sup>

TREFLAN E.C./Sencor<sup>2</sup>

TANK-MIXES

TREFLAN E.C./Sencor 50W (50% Wettable Powder), TREFLAN E.C./Lexone L (480 g/L Suspension) or TREFLAN E.C./Sencor 500 (500 g/L Flowable), and TREFLAN

E.C./Lexone DF (75% Dry Flowable), tank-mix combinations effectively control all of the annual grasses and broadleaf weeds listed on the TREFLAN E.C. label, plus many additional broadleaf weeds including smartweed, velvetleaf, wild mustard and common ragweed. Control of cocklebur may be erratic ranging from fair to excellent, depending on soil temperature, time of weed germination, depth of weed seed in the soil, and the amount and timing of soil moisture. Control may be improved with timely cultivation. TREFLAN E.C./Lexone or TREFLAN E.C./Sencor tank-mixes may be applied up to 10 days before planting. Improper soil incorporation can result in crop injury or erratic weed control.

TREFLAN E.C. AND LEXONE/SENCOR TANK MIX COMBINATIONS

## CLEAN EQUIPMENT

All components of the spray equipment should be free of rust and corrosion and contain no residues of previously sprayed pesticides.

## IN-LINE NOZZLE SCREENS

All screens should be 50 mesh or coarser to allow wettable powders and flowables to pass.

# MIXING SEQUENCES

The following steps are recommended particularly when combining emulsifiable concentrates (E.C.) with wettable powders or with dry liquid flowable formulations.

- 1. Fill the spray tank 1/4 to 1/3 with water.
- 2. Add the calculated amount of Lexone/Sencor to the tank WHILE RECIRCULATING AND WITH THE AGITATOR RUNNING.
- 3. Fill the tank to the desired level with water while maintaining constant agitation of the mixture.
- 4. Add the calculated amount of TREFLAN E.C. to the tank and agitate thoroughly.

Variations in this mixing sequence may lead to incompatibilities.

#### AGTTATTON:

After tank-mixing TREFLAN E.C. with Lexone/Sencor, the mixture should be thoroughly agitated and sprayed immediately to ensure uniform application.

Broadcast Rates Per Hectare

Soil Texture*	TREFLAN E.C.	Sencor 50W	Lexone L	Sencor 500	Lexone DF
Light (sandy loam**) loamy sand***)	1.5L	850g	-	850mL	1
Medium (loam, silt loam, silt, sandy clay loam)	2.0L	1.1kg	850mL	1.1L	550g
Heavy (silty clay, silty clay loam**, clay loam, clay)	2.75L	1.1kg	1.0L	1.1L	700g

<sup>\*</sup>On variable soils with light sandy areas, some injury may occur on sandy areas if the rate used is for the heavier soil type in the field.

## DIRECTIONS FOR USE:

For proper preparations, application and incorporation follow instructions under "DIRECTIONS FOR USE ON OILSEED, VEGETABLE AND NURSERY CROPS for TREFLAN E.C.

#### SPECIAL PRECAUTIONS:

Applied according to directions and under normal growing conditions, tank-mixed TREFLAN E.C./Lexone or TREFLAN E.C./Sencor will not reduce soybean yields. However, this treatment has limited crop tolerance and initial crop injury may occur under certain circumstances. Over application may result in stunting, crop injury or soil residue. Uneven application or improper soil incorporation of TREFLAN E.C./Lexone or TREFLAN E.C./Sencor can result in erratic weed control or crop injury depending on rate used. Seedling disease, cold weather, deep planting, excessive moisture, high soil pH (above 7.5), high salt concentration or drought may weaken soybean seedlings and increase the possibility of damage from TREFLAN E.C./Lexone or TREFLAN E.C./Sencor. Under these conditions, delayed crop development or reduced yields may result.

Do not plant the soybean varieties Altona or Vansoy on areas treated with

<sup>\*\*</sup>Sandy loam and silty clay loam soils are transitional soils and may be classified as medium textured soils in some regions.

<sup>\*\*\*</sup> Do not use on light soils with less than 1% organic matter.

tank-mixed TREFLAN E.C./Lexone or TREFLAN E.C./Sencor as unacceptable injury may result.

### CAUTIONS

Lexone or Sencor may be harmful if swallowed or inhaled. Avoid contact with eyes, skin, or clothing. Avoid breathing of dust or spray mist. Wash clothing thoroughly with soap and hot water before reuse. Do not contaminate feed or food. Keep out of reach of children.

Do not use the foliage from soybeans treated with the TREFLAN E.C./ Lexone or TREFLAN E.C./Sencor tank-mix for feed or forage. Do not contaminate any body of water or apply to any area not specified on this instruction sheet. Do not allow sprays to drift into adjacent desirable plants.

# TREFLAN E.C. APPLICATION WITH FLUID FERTILIZERS

TREFLAN E.C. may be mixed with liquid nitrogen fertilizer (eg. 28-0-0) for application either preplant soil incorporated or postplant incorporated. All TREFLAN E.C. label recommendations regarding rates per hectare, approved crops, incorporation, special instructions, cautions and special precautions must be followed.

TREFLAN E.C. should be poured directly into the liquid fertilizer, mixed thoroughly and applied as soon as possible. Constant agitation is needed until application is complete. Apply the TREFLAN E.C./fertilizer mixture with properly calibrated equipment suitable for liquid fertilizer application. Ensure that the material is applied uniformly to the soil surface. Follow normal TREFLAN E.C. incorporation procedures.

### COMPATIBILITY TEST

Small quantities of liquid fertilizer and herbicide should be tested for compatibility prior to tank mixing.

- 1. Put 500 mL of liquid fertilizer into a 1L jar.
- 2. Add 10 mL of TREFLAN E.C.
- 3. Close jar and shake well.
- 4. The herbicide and fertilizer are compatible if the herbicide remains in suspension after five minutes. If the herbicide settles out quickly but goes into suspension easily upon shaking, the mixture may be used provided constant agitation is utilized.

<sup>1</sup>Lexone is a registered trademark of E.I. DuPont de Nemours and Company (Incorporated)

<sup>&</sup>lt;sup>2</sup>Sencor is a registered trademark of Bayer AG

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#### PRAIRIE PROVINCES

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## INSTRUCTIONS:

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### PRECAUTION:

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#### FIRST AID:

In case of contact with eyes or skin, flush with water. Contact physician if swallowed. If swallowed, induce vomiting followed by at least 300 mL of water to children and 700 mL to adults. Make certain vomitus is not inhaled. After vomiting occurs, give 30-40 mL of activated charcoal in 100 mL of water.

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# RINSE, DRAIN AND DISPOSAL PROCEDURE

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- 3. Do not reuse container.
- 4. Make the empty container unsuitable for further use and dispose in accordance with Provincial requirements.
- 5. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the regional office of Conservation and Protection, Environment Canada.

## STORAGE

DO NOT FREEZE.

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ENSURE ANY CRYSTALS ARE DISSOLVED BEFORE ADDING TO SPRAY TANK.

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#### WARNING:

Do not apply to peat or muck soils.

Do not apply to wet soils, soils in poor working condition or soils which contain more than 15% organic matter.

Do not apply to soils subjected to prolonged periods of flooding.

Apply at the recommended rates.

Applied and incorporated according to directions and under normal growing conditions, TREFLAN E.C. will not harm the treated crop. Seedling disease, cold weather, deep planting, excessive moisture, high salt concentration, or drought may weaken crop seedlings and increase the risk of damage from TREFLAN E.C. resulting in delayed crop development or reduced yields.

Under normal conditions, TREFLAN E.C. carryover will not harm crops grown in rotation. As a precaution, oats, sugarbeets and small-seeded annual grasses such as timothy, canaryseed grass and creeping red fescue should not be grown in rotation following a TREFLAN E.C. treated crop.

Populations of green foxtail tolerant to trifluralin have developed in a number of fields in Western Canada which have had a long history of repeated trifluralin use. Trifluralin or ethalfluralin containing products (i.e. ADVANCE\* 10G, TREFLAN\*, HERITAGE\*\*, TRIFLUREX, RIVAL, FORTRESS, AND EDGE\*) will not control trifluralin tolerant green foxtail. To delay selection or reduce the spread of trifluralin tolerant green foxtail, avoid use of these products repeatedly in the same field, or use a separate herbicide

application for control of trifluralin tolerant green foxtail.

DO NOT FREEZE.

CAUTION: Do not graze the treated crops or cut for hay; there are not sufficient data available to support such use.

Store TREFLAN E.C. in heated storage. Active ingredient crystallization may occur at temperatures below 5'C. If stored below 5'C, check for crystals in the bottom of each container. If crystals are present, place the container in a warm area (at least 15'C) for several hours. Agitate contents by inverting several times and return it to the upright position. After several hours, if any crystals remain, agitate or circulate container contents again.

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TREFLAN E.C. is a preemergence herbicide which is mixed (incorporated) into the soil to provide long-lasting control of many annual grasses and broadleaf weeds. TREFLAN E.C. controls susceptible weeds by killing seedlings as they germinate. It does not control established weeds.

DIRECTIONS FOR USE ON OILSEED CROPS

NOTE:

REFER TO SECTION ON WHEAT AND BARLEY FOR SPECIFIC INSTRUCTIONS ON THE USE OF TREFLAN E.C. FOR CONTROL OF WILD MILLET (GREEN FOXTAIL AND YELLOW FOXTAIL).

# LAND PREPARATION

(See below for weeds controlled and crops registered)

Cultivate to destroy existing weeds before TREFLAN E.C. application. When applying to stubble fields, chop and thoroughly mix crop residues into soil to a depth of 10-15 cm. Disc type implements provide the best results. To avoid concentrating wild oat seeds below the treated layer, do not plow (moldboard) land prior to TREFLAN E.C. application.

## APPLICATION

Add the recommended amount of TREFLAN E.C. to clean water in the spray tank during the filling operation and agitate thoroughly. Apply in at least 100 litres of water per hectare (100 L/ha broadcast basis) using any properly calibrated low-pressure herbicide sprayer that will apply the spray uniformly. Check the sprayer daily to ensure proper calibration and uniform application. Apply TREFLAN E.C. to soil surface and incorporate in the same operation if possible.

Ensure that large clods are broken. Do not delay incorporation more than 24 hours after application. When applied as directed, TREFLAN E.C. will not harm crops that follow in rotation; however, an over application caused by overlapping, letting the sprayer run in one spot, improper calibration, non-uniform application, etc., may reduce stands of crops that follow in rotation.

#### INCORPORATION

To incorporate, work TREFLAN E.C. into the soil in two different directions. Use a tandem disc, discer or field (Vibrashank type) cultivator set to work 8-10 cm deep for the first incorporation. Disc or cultivate in a cross direction at the same depth. Operate disc implements at 7-10 km/h and cultivators at 10-13 km/h. (Deep tillage cultivator not recommended.)

TREFLAN E.C. should not be incorporated with a field cultivator when the soil is crusted, lumpy, or too wet for good mixing action.

Disc type implements are preferred on stubble to ensure a 10-cm depth of operation.

Incorporation with implements set to cut less than 8 cm deep or more than 10 cm deep may result in erratic weed control or crop damage.

Rod weeders, harrows, deep tillage cultivators, chisel plows, or hoe drills will not properly incorporate TREFLAN E.C.

#### FALL APPLICATION

TREFLAN E.C. can be applied in the fall between Sept. 1 and prior to soil freeze-up for weed control for the following year. Apply fall rates and incorporate as above. The initial incorporation must not be done more than 24 hours after application. It is preferred to do both incorporations in the fall followed by shallow tillage (5-8 cm) in the spring prior to planting. However, one incorporation may be done in the fall and the second in the spring at the time of seedbed preparation, provided both operations are done at the recommended depth. (Refer to spring tillage recommendations.)

#### SUMMER APPLICATION

TREFLAN E.C. can be applied to summerfallow between June 1 and Sept 1 for weed control in canola or flax the following year. Apply the summer rate and incorporate as above. TREFLAN E.C. must be incorporated at least twice with the implement operated in two different directions. The initial incorporation must not be more than 24 hours after application. The second incorporation (and subsequent incorporations) may be done whenever necessary to destroy resistant weed growth during the remainder of the fallow season. Shallow tillage (5-8 cm) is necessary in the spring prior to planting. (Refer to Spring tillage recommendations.)

## SPRING TILLAGE FOR SEEDBED PREPARATION

Spring tillage following Summer of Fall application of TREFLAN E.C. should be done when the soil is warm enough to promote germination. Use a disc or Vibrashank cultivator operated at 5-8 cm deep. Avoid transplanting weed seedlings; seed into a weed-free seedbed using accepted cultural practices.

TREFLAN E.C. APPLICATION WITH FLUID FERTILIZERS

TREFLAN E.C. may be mixed with liquid nitrogen fertilizer (eg. 28-0-0) for application either preplant soil incorporated or postplant incorporated. TREFLAN E.C. may also be mixed with Avadex BW and liquid fertilizer for postplant incorporated application in wheat or barley. All TREFLAN E.C. label recommendations regarding rates per hectare, approved crops, incorporation, special instructions, cautions and special precautions must be followed.

TREFLAN E.C. should be poured directly into the liquid fertilizer, mixed thoroughly and applied as soon as possible. Constant agitation is needed until application is complete. Apply the TREFLAN E.C./fertilizer mixture with a properly calibrated equipment suitable for liquid fertilizer application. Ensure that the material is applied uniformly to the soil surface. Follow normal TREFLAN E.C. incorporation procedures.

#### COMPATIBILITY TEST

Small quantities of liquid fertilizer and herbicide should be tested for compatibility prior to tank-mixing.

- 1. Put 500 mL of liquid fertilizer into a 1L jar.
- 2. Add 10 mL of TREFLAN E.C.
- 3. Close jar and shake well.
- 4. The herbicide and fertilizer are compatible if the herbicide remains in suspension after five minutes. If the herbicide settles out quickly but goes into suspension easily upon shaking, the mixture may be used provided constant agitation is utilized.

# WEEDS CONTROLLED

Annual Grasses Annual Broadleaves

Wild Oats
Wild Buckwheat
Cow Cockle
(Green and Yellow Foxtails)

Barnyard Grass
Crab Grass
Wild Buckwheat
Cow Cockle
Lamb's-quarters
Pigweed
Russian thistle

Brome Grass Chickweed
Cheat Purslane
Stink Grass Knotweed
Goose Grass Carpetweed

Annual Blue Grass Persian Darnel

NOTE: When used as directed, TREFLAN E.C. will provide commercially acceptable control of the above weeds. Some wild oats and wild buckwheat may escape the herbicide action of TREFLAN E.C. but will be retarded in growth and will provide little competition to the crop.

# CROPS REGISTERED

Canola Flax(Summer and Fall application only)

Soybeans Sunflower

Mustard Faba Beans (Horsebeans)
Dry Beans Peas (Field and Canning)

Black Beans Crambe

Transplanted Shelterbelts

PRAIRIE PROVINCES RECOMMENDED RATES OF TREFLAN E.C. PER HECTARE

	SOIL TEXTURE			
	Light	Medium or	Heavy	
	Sand Sandy loam	Loam Silt Loam Silt Sandy Clay loam	Silty Clay Loam Clay Loam Silty Loam Silty Clay Clay	
	(less than 6% OM) (all soils with 6-15% OM)			
SPRING APPLICATION	2.0L/ha	2.75L/ha		
Canola, Sunflower, Mustard, Faba Beans, Crambe; Peas (Field & Canning), Black Beans Dry Beans, Soybeans				
TREFLAN E.C. can be applied immediately prior to, or up to 3 weeks before planting.				
Shelterbelts (American Elm, Caragana, Green Ash, Scotch Pine, and Siberian Elm)	5.5L/ha	11.0L/ha		
	planting seedlings. The h			

Apply prior to transplanting seedlings. The higher rate of application will result in better weed control and longer persistence in the soil. Wild mustard may not be controlled at these rates.

FALL APPLICATION	2.75L/ha	3.5L/ha		
Canola, Sunflower, Mustard, Flax, Peas, Faba Beans, Black Beans, Soybeans, Dry Beans				
Apply and incorporate between Sept. 1 and prior to soil freeze-up.				
SUMMER APPLICATION Canola Flax	All Soils 4.25L/ha			
Apply and incorporate between June 1 and Sept. 1. Second and subsequent incorporations may be done anytime prior to soil freeze-up.				

NOTE: Do not delay incorporation more than 24 hours after application.

## SPECIAL INSTRUCTIONS FOR FLAX

- 1. Both incorporations of TREFLAN E.C. should be done in the season of application prior to seeding flax in the spring.
- 2. The seedbed should be shallowly tilled (5-8 cm) and packed just prior to seeding in the spring to ensure a firm seedbed and accurate depth of planting.
- 3. Seeding should be done with a press drill and hoe drill. Seed into a moist seedbed no more than 4 cm deep.
- 4. Do not seed flax early in May when soil conditions are cold. Seeding should generally not be prior to May 15.
- 5. Refer to warning statement regarding stresses that can lead to crop injury or yield reduction.

DIRECTIONS FOR USE IN WHEAT AND BARLEY FOR CONTROL OF WILD MILLET (GREEN FOXTAIL)

## MODE OF ACTION:

TREFLAN E.C. is applied and incorporated in the soil in the spring AFTER PLANTING and prior to the emergence of the wheat or barley for the control of Wild Millet (Green Foxtail). Wild Millet (Green Foxtail) control is achieved by establishing a shallow, treated layer of TREFLAN E.C. near the soil surface and safety is maintained since the crop seeds are located in untreated soil beneath the layer.

RECOMMENDATION FOR APPLICATION AND INCORPORATION OF TREFLAN E.C. FOR WHEAT AND BARLEY

1. Wheat and barley should be seeded to a depth of 5.8 cm in a well-tilled seedbed.

- 2. Apply TREFLAN E.C. as soon as possible after seeding (before crop emerges) at 1.5 L/ha on light or medium textured soils or 2.0 L/ha on heavy textured soils. Add the recommended amount of TREFLAN E.C. to clean water in the spray tank during the filling operation and agitate thoroughly. Apply at least 100 L/ha of water (broadcast basis) using any properly calibrated low-pressure herbicide sprayer. Check the sprayer daily to ensure proper calibration and uniform application.
- 3. Apply TREFLAN E.C. to soil surface which is free of trash or was fallowed the previous year. Incorporate to a SHALLOW depth with DIAMOND HARROWS or TYNE HARROWS operated over the same area in two different directions at speeds of at least 8 km/h. Application and the first incorporation should be done in the same operation if possible. Both incorporations must be done within 24 hours of application of TREFLAN E.C.

TREFLAN E.C. PLUS AVADEX(1) BW AS A TANK-MIXED POSTPLANT PREEMERGENCE INCORPORATED APPLICATION FOR WILD MILLET (GREEN FOXTAIL) AND WILD OAT CONTROL IN WHEAT AND BARLEY

## **RECOMMENDATIONS:**

Apply and soil incorporate TREFLAN E.C. plus AVADEX BW in a tank-mixed combination in the spring after planting and prior to emergence of wheat and barley. Soil incorporate the mixture to a shallow depth (above the seed). SHALLOW incorporation may be accomplished with DIAMOND HARROWS, TYNE HARROWS or other similar implements operated twice over the treated area. Seed to a depth of 5-8 cm using any conventional seeding implement.

Apply TREFLAN E.C. at a rate of 1.5 L/ha on light and medium soils and  $2.0~\mathrm{L/ha}$  on heavy soils. Apply AVADEX BW at a rate of  $3.5~\mathrm{L/ha}$  in wheat and  $4.25~\mathrm{L/ha}$  in barley. Rates are stated on a broadcast basis. Application should be confined to fields which are trash-free or were fallowed during the previous year.

## CAUTION

TREFLAN E.C. must not be used on oats, rye or grass crops. Wheat or barley may be injured if seeded through a treated layer or into a deeply incorporated layer of TREFLAN E.C. Applied according to directions and under normal growing conditions, TREFLAN E.C. will not adversely affect wheat or barley. Seedling disease, cold weather, improper seeding depth, excessive moisture, high salt concentration, or drought may weaken crop seedling and increase the possibility of damage from TREFLAN E.C. Under these conditions, delayed crop development or reduced yields may result. This TREFLAN E.C. treatment may not provide adequate control of weeds other than Wild Millet (Green Foxtail).

NOTE: Do not use TREFLAN E.C. incorporated shallowly with harrows for weed control in oilseed crops. Refer to directions for use on oilseed crops for specific instructions on application and incorporation of TREFLAN E.C. on crops other than wheat and barley.

<sup>1</sup>AVADEX is a registered trademark of Monsanto Company, U.S.A.

\*\* HERITAGE is a registered trademark of A. E. McKenzie Co. Ltd. DowElanco is a registered user.

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