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POOL

PRAIRIE PROVINCES

Treflan(R) E.C.

A Selective Liquid Herbicide for
Pre-Plant Soil Incorporated
Weed Control In Many Field Crops,
Vegetables and Ornamentals

8.3 LITRES

HANDI-JUG(R)

READ THE LABEL BEFORE USING

GUARANTEE: TRIFLURALIN.....545 GRAMS PER LITRE

REGISTRATION NO. 17106 PEST CONTROL PRODUCTS ACT

AGRICULTURAL

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(R)HERITAGE is a registered trademark of Heritage Garden Products

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Distributed By:

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P.O. Box 9800
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CAUTION

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 PRAIRIE PROVINCES ONLY.

PRECAUTION:

KIIP 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, feeds or fish ponds.

FIRST AID

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

STORAGE:

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. Then agitate contents by inverting the jug 2-3 times and return it to the upright position. After several hours, if any crystals remain, agitate container again. ENSURE ALL CRYSTALS ARE DISSOLVED BEFORE ADDING TO SPRAY TANK.

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.

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. Make the empty container unsuitable for further use and dispose in accordance with Provincial requirements.
4. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the regional office of Conservation and Protection, Environment Canada.

NOTICE TO USER

This control product is to be used only in accordance with the directions on this label. It is an offence 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.

WARNINGS

Do not apply to peat or muck soils.

Do not apply to fields spread with manure within the last 12 months. Ensure that after this period the manure has been thoroughly disintegrated and mixed into the soil to a depth of 10-15 cm.

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.

Do not apply to sandy soils with less than 1% organic matter.

Application to severely eroded knolls may result in reduced crop stand or rotational crop injury.

Apply at the recommended rates.

DO NOT APPLY BY AIR.

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 risk of damage from TREFLAN E.C., resulting in delayed crop development or reduced yields. Drought conditions in the year prior to seeding rotational crops may result in higher levels of TREFLAN E.C. in the soil.

To reduce the possibility of injury to rotational crops, seed the crops shallow into a warm, moist seedbed.

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. TREFLAN, HERITAGE(R), TRIFLUREX(R), RIVAL(R), FORTRESS(R), and EDGE(R)) 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.

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, Canary seed grass and Creeping Red Fescue, should not be grown in rotation following a TREFLAN E.C. treated crop.

RINSE/DRAIN AND DISPOSAL PROCEDURE

1. Rinse the emptied container thoroughly and add the 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. Make the empty container unsuitable for further use and dispose in accordance with Provincial requirements.
4. 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

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. Then agitate contents by inverting tee jug 2-3 times and return it to the upright position. After several hours, if any crystals remain, agitate container again.

ENSURE ALL CRYSTALS ARE DISSOLVED BEFORE ADDING TO SPRAY TANK.

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, feeds and fish ponds.

FIRST AID:

In case of contact, 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.

DIRECTIONS FOR USE

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.

GENERAL INFORMATION FOR OILSEED AND SPECIAL CROPS

CROPS REGISTERED

Canola (Rapeseed)	Flax (summer and fall application only)
Triazine-Tolerant Rapeseed (T.T. Canola)	Sunflowers
Lentils (fall application only)	Faba Beans (Horsebeans)
Mustard	Peas (Field and Canning)
Dry Common Beans (White or Kidney)	Crambe
Black Beans	Transplanted Shelterbelts
Soybeans	Sainfoin
Strawberries (spring application only)	Alfalfa Establishment (Flax & Rapeseed cover crops only)
Asparagus - established 3 years	Vegetables (see special instructions)
Safflower	
Sweet Clover (spring only)	

WEEDS CONTROLLED

Annual Grasses	Annual Broadleaves
Wild Oats	Wild Buckwheat
Wild Millet (Green* and Yellow Foxtail)	Cow Cockle
Barnyard Grass	Pigweed
Crab Grass	Lamb's-quarters
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.

*TREFLAN E.C. will not control trifluralin tolerant Green Foxtail. See specific recommendations in WARNING section of the label.

LAND PREPARATION:

Cultivate to destroy existing weeds and ensure that large clods are broken before TREFLAN E.C. application. When applying to stubble fields, chop and thoroughly mix crop residues into soil to a depth of 10 cm. Disc type implements provide the best results. Swath windrows should be evenly spread before cultivation to avoid strips of concentrated trash cover. TREFLAN E.C. should not be sprayed on a soil surface with more than 25% trash cover. To avoid concentrating wild oat seeds below the treated layer do not plow (moldboard) land prior to TREFLAN E.C. application. If a swath has been removed by burning, cultivate once to remove the charcoal layer prior to application of TREFLAN E.C.

APPLICATION

Add the recommended amount of TREFLAN E.C. to clean water in the spray tank during the filling operation and agitate thoroughly. Apply with at least 100 L 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 over the field. Apply TREFLAN E.C. to soil surface and incorporate in the same operation if possible.

Do not delay incorporation more than 24 hours after application. When applied as directed, TREFLAN E.C. will not harm the treated crop or 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 treated crops, or 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. A field cultivator (Vibrashank type) is defined as an implement with 3 or 4 rows of sweeps spaced at

intervals of 20 cm or less and staggered so that no soil is left unturned. The second incorporation should be a discing or cultivation in a cross direction at the same depth anytime prior to planting. Operate disc implements 7-10 km/hr. and cultivators at 10-13 km/hr. Failure to operate implements at recommended speeds may result in erratic weed control due to poor TREFLAN E.C. distribution in the soil.

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

SPRING APPLICATION

TREFLAN E.C. can be applied immediately prior to or up to three weeks before planting.

SUMMER APPLICATION

TREFLAN E.C. can be applied to summerfallow between June 1 and Sept. 1 for weed control in rapeseed or flax the following year. Apply the summer rate and incorporate as above. Not recommended for sand and sandy loam soils.

TREFLAN E.C. must be incorporated at least twice with the implement operated in two different directions. The initial incorporation must be done within 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 for Seedbed Preparation.)

FALL APPLICATION

TREFLAN E.C. can be applied in the fall between Sept. 1 and prior to soil freeze-up for weed control the following year. Apply fall rates and incorporate as above. The initial incorporation must be done within 24 hours after application. It is preferred to do both incorporations in the fall followed by 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 for Seedbed Preparation.)

Spring Tillage For Seedbed Preparation

Spring tillage following summer or fall application of TREFLAN E.C. should be done prior to seeding when the soil is warm enough to promote germination. Use a disc or field cultivator (Vibrashank) set to cut at 5-8 cm deep. For optimum weed control in soils with heavy wild oat populations prework early in the spring with a shallow cultivation to promote weed seed germination, followed by a 5-8 cm deep cultivation prior to seeding to destroy existing green growth. Avoid transplanting weed seedlings; seed into a weed-free seedbed using accepted cultural practices. Avoid excessive compaction of the TREFLAN E.C.-treated soil layer. Any operation that results in a shallower or compacted treated layer may allow weeds to emerge. This compaction may result from tractor wheel tracks, implement wheels, drill press wheels, or other field operations done after incorporation. Soils are more susceptible to compaction when they are moist.

TREFLAN E.C. USE FOR OILSEED AND SPECIAL CROPS

RECOMMENDED RATES OF TREFLAN E.C.

		SOIL TEXTURE	
		Light	Medium-Heavy
Crop	Soil Zones and Soil	Sand	Loam
	Organic Loam	Sandy Loam	Silty Clay Loam, Clay Loam, Silty Clay Clay

Rapeseed (Canola) T.T. Rapeseed (T.T. Canola) Sunflowers Dry Beans Mustard Faba Beans Soybeans	Brown Dark Brown or Black 2-6% O.M.	1.5 L/ha 5.5 ha/jug 13.7 acres/jug	2.0 L/ha 4.2 ha/jug 10.3 acres/jug
Peas Crambe Alfalfa Sainfoin Black Beans Safflower Sweet Clover	Black or Deep Black 6-15% O.M.	2.0 L/ha 4.2 ha/jug 10.3 acres/jug	2.0-2.6* L/ha 3.2-4.2 ha/jug 7.9-10.3 acres/jug *Use 2.6 L/ha for heavy wild oat infestations.
Rapeseed (Canola) T.T. Rapeseed (T.T. Canola) Flax Safflower	Brown Dark Brown Black Deep Black	Not Recommended	3.0 L/ha 2.8 ha/jug 6.8 acres/jug
Rapeseed (Canola) T.T. Rapeseed (T.T. Canola) Lentils Sunflower Faba Beans Mustard, Flax	Brown Dark Brown or Black 2-6% O.M.	2.0 L/ha 4.2 ha/jug 10.3 acres/jug	2.6 L/ha 3.2 ha/jug 7.9 acres/jug
Peas, Black Beans Soybeans Drybeans Alfalfa Establishment Safflower	Black or Deep Black 6-15% O.M. jug	2.6 L/ha 3.2 ha/jug 7.9 acres/ jug	2.6-3.0* L/ha 2.8-3.2 ha/jug 6.8-7.9 acres/jug *Use 3.0 L/ha for heavy wild oat infestations.

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

SPECIAL INSTRUCTIONS FOR FLAX AND LENTILS

- Both incorporations of TREFLAN E.C. must be done in the season of application prior to seeding flax in the spring.
- 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.
- Seeding should be done with a press drill or 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.

TREFLAN E.C. USE FOR SHELTERBELTS

Apply TREFLAN E.C. prior to transplanting seedlings. The higher rate of application will result in better weed control and longer persistence in the soil. Refer to General Information for Oilseed and Special Crops for details on application and incorporation.

RECOMMENDED RATES OF TREFLAN E.C.
(LITRES PER HECTARE)

SOIL TEXTURE		
	Light	Medium-Heavy
	Sand Sandy Loam (2-6% organic matter)	Loam Silty Clay Loam Silt Loam Clay Loam Silt Silty Clay Sandy Clay Clay Loam (6-15% organic matter)
American Elm Caragana Green Ash Scotch Pine Siberian Elm	4.1 L/ha	8.2 L/ha

NOTE: TREFLAN E.C. at 2 L/ha may be applied pre-plant incorporated one week prior to sowing Siberian Elm seed, for grass and broadleaf weed control.

TREFLAN E.C. APPLICATION WITH FLUID FERTILIZERS

TREFLAN E.C. may be mixed with liquid nitrogen fertilizer (e.g., 28-0-0) for application either pre-plant 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 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.

Small quantities of liquid fertilizer and herbicide should be tested for compatibility prior to tank-mixing. Use the compatibility test as follows:

1. Put 500 mL of liquid fertilizer into a 1-L 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.
5. A compatibility test is also recommended when there is a change in fertilizer supplier, fertilizer formulations and climatic temperatures.

TREFLAN IMPREGNATED/COATED ONTO DRY GRANULAR FERTILIZER

Dry bulk fertilizer may be impregnated or coated with TREFLAN E.C. Application should be made as soon as possible after blending. All TREFLAN E.C. label recommendations regarding rates per hectare, approved crops, incorporation, special instructions, cautions, and special precautions must be followed.

To obtain commercially acceptable weed control with TREFLAN impregnated on fertilizer, the following minimum rates of fertilizer must be used:

SPRING Application	330 kg/ha
FALL Application	250 kg/ha

Mix and blend dry fertilizer and TREFLAN E.C. in any commonly used dry fertilizer blender. Ensure that uniform spray coverage is obtained. Sufficient blending/mixing time should be allowed to obtain uniform coverage of dry fertilizer with TREFLAN E.C.

Spread the fertilizer/TREFLAN E.C. mixture with a properly calibrated granular fertilizer applicator. Be certain the blended material is applied uniformly to the soil surface. The first incorporation should be completed as soon as possible (within 24 hours) after fertilizer application. It is recommended to DELAY THE SECOND INCORPORATION FOR A PERIOD OF AT LEAST SIX

DAYS to ensure optimum TREFLAN dissipation within the soil.

CAUTION: Any commonly used dry fertilizer can be used for TREFLAN E.C. impregnation except ammonium nitrate. Use with nitrate fertilizers may cause explosion and fire.

NOTE: Compliance with the Fertilizer Act and Regulations (Agriculture Canada) is the responsibility of the individual/company selling the TREFLAN E.C./fertilizer mixture.

TREFLAN E.C. USE FOR SUNFLOWERS

For TREFLAN E.C. pre-plant incorporated for sunflowers follow label directions for application and incorporation techniques of TREFLAN E.C. in Oilseed and Special Crops.

TREFLAN E.C. Plus Amiben(R) (Tank-mix) (Spring Application Only)

For use as a pre-plant incorporated treatment for the control of TREFLAN E.C.-susceptible weeds plus Amiben susceptible weeds such as wild mustard and stinkweed.

RATES PER HECTARE

	Soil Texture	
	Light	Medium-Heavy
TREFLAN E.C	1.5 L/ha	2.0 L/ha
Amiben(R)	9.25 L/ha	

Follow all label directions above for the application and incorporation of TREFLAN E.C. in oilseed crops.

Read and observe all directions and cautions on the Amiben label.

TREFLAN E.C. USE FOR TRIAZINE TOLERANT RAPESEED (T.T. CANOLA)

NOTE: THIS TREATMENT FOR USE ONLY ON TRIAZINE-TOLERANT RAPESEED or CANOLA). NON-TRIAZINE TOLERANT RAPESEED WILL BE KILLED BY THIS COMBINATION.

TREFLAN E.C. PLUS SENCOR(R) (TANK-MIX): PRE-PLANT INCORPORATED

TREFLAN E.C. may be applied in a tank-mix combination with Sencor as a pre-plant incorporated broadcast application to Triazine-Tolerant Rapeseed (T.T. Canola) for the control of many annual grasses and broadleaf weeds.

WEEDS CONTROLLED BY TREFLAN E.C. PLUS SENCOR

In addition to those weeds controlled by Treflan alone, the Treflan/Sencor tank-mix will control the following:

Wild Mustard
Stinkweed
Green Smartweed
Lady's-thumb
Volunteer Rapeseed (Non-Triazine-Tolerant)
Shepherd's-purse
Hempnettle

APPLICATION

Select the proper rates of TREFLAN E.C. and Sencor 500F/75DF as shown based on soil type and percent organic matter. Follow all land preparation, mixing, spraying, incorporation directions and precautions on this label.

FOR TRIAZINE-TOLERANT RAPESEED; PEDIGREED SEED ONLY.

MIXING SEQUENCE:

IT IS IMPORTANT TO FOLLOW THE CORRECT SEQUENCE WHEN MIXING TREFLAN E.C. AND SENCOR IN THE SPRAY TANK.

The following steps are essential when combining TREFLAN E.C. with Sencor:

1. Fill the spray tank 1/4 to 1/3 full with clean water.
2. While continuing to fill the spray tank and with the agitation and recirculating system operating, slowly add the full amount of Sencor for that tankload.
3. Fill the spray tank to the desired level with clean water, while maintaining constant agitation of the mixture.
4. After the full amount of Sencor is thoroughly mixed, add the calculated amount of TREFLAN E.C. to the tank and agitate thoroughly.
5. To avoid any compatibility problems, spray immediately. Continuous agitation is required until the mixture is sprayed out. Do not allow the sprayer to stand without agitation or settling will occur and vigorous mixing with a paddle will be necessary to remix the chemical in the spray tank.

Use the Rinse/Drain and Disposal Procedure which follows to ensure all contents are removed from containers prior to disposal.

Spray Application:

Apply the tank-mix of Treflan and Sencor to the soil surface and incorporate in the same operation, if possible. Do not delay first incorporation more than 24 hours after application. Apply the tank-mix broadcast basis using at least 100L of water per hectare (broadcast basis) using any properly calibrated low-pressure herbicide sprayer that will apply the spray uniformly application may be made with any properly calibrated commercial tractor-drawn or self propelled field sprayer equipped with the following:

1. Nozzle tips no finer than 6502, 8002, TK2 with nozzle screens no finer than 0.3 mm (50 mesh).
2. 0.3 mm or larger line strainers or screen.
3. A pump of sufficient through the by-pass capacity to provide adequate volume and/or jet agitation system to provide a uniform spray mixture even while the booms are operating.

NOTE: Felt filters, small nozzle tips or smaller screens will become clogged.

Sprayer Cleanup:

Spray equipment must be thoroughly cleaned to remove remaining traces of herbicide that might injure other crops to be sprayed. Drain any remaining spray solution of Sencor and Treflan from the spray tank and discard in non-crop areas away from water supplies. Rinse the spray tank and refill with water; adding a heavy duty detergent at the rate of 250 mL/100L of water. Recycle this mixture through the equipment for 5 minutes and spray out. Repeat this procedure twice. Fill the spray tank with clean water, recycle for 5 minutes, and spray out. Clean pump and nozzle screens thoroughly. Wash away any spray mixture from the outside of the spray tank, nozzles or spray rig.

INCORPORATION

Refer to General Information for Oilseeds and Special Crops.

NOTE: TREFLAN E.C. and Sencor can be applied in the fall prior to soil freeze-up for weed control the following year. Apply fall rates and incorporate as above. The initial incorporation must be done within 24 hours after application. It is preferred to do both incorporations in the fall followed by 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.)

Spring Tillage and Seedbed Preparation

Spring tillage following fall application of TREFLAN E.C. and Sencor 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. Since Triazine Tolerant rapeseed (T.T. Canola) is sensitive to deep seeding, the seedbed should be shallowly tilled and packed just prior to seeding in the spring to ensure a firm seedbed and accurate depth of planting.

SPRING APPLICATION

RECOMMENDED RATES OF PRODUCT PER HECTARE

	Soil Texture	
	Light	Medium or Heavy
	Sand Sandy Loam (less than 6% organic matter)	Loam Silty Clay Silt Loam Loam Silt Clay Loam Sandy Clay Loam Silly Clay Clay (all soils with 6-15% organic matter)
Treflan E.C.	1.5 L/ha	2.0 - 2.6 L/ha**
Sencor 500DF*	425 - 550 mL/ha	550 - 850 mL/ha
Sencor 75DF*	275 - 375 g/ha	375 - 550 g/ha

* Sencor 500F/75DF rate varies with soil organic matter; the higher the organic matter the higher the rate of Sensor required.

- On all soils with 2-3% organic matter, use 425 mL/ha 500F, or 275 g/ha 75DF.
- On all soils with 3-6% organic matter, use 550 mL/ha 500F, or 375 g/ha 75DF.
- On all soils with 6-10% organic matter, select a rate in the range of 550-850 mL/ha 500F or 375-550 g/ha 75DF according to soil organic matter.
- On all soils with 10% organic matter or greater, use 850 mL/ha 500F, or 550 g/ha 75DF.

**On soils where wild oat infestation is heavy in soils with high organic matter content (i.e., 6-15%) use the 2.6 L/ha rate of Treflan E.C.

FALL APPLICATION

RECOMMENDED RATES OF PRODUCT PER HECTARE

	Soil Texture	
	Light	Medium or Heavy
	Sand Sandy Loam (less than 6% organic matter)	Loam Silty Clay Loam Silt Loam Clay Loam Silt Silty Clay Sandy Clay
TREFLAN E.C.	2.0 L/ha	2.6-3.0 L/ha**
Sencor 500F*	550-700 mL/ha	700-850 mL/ha
Sencor 75DF*	375-475 g/ha	475-550 g/ha

* Sencor 500F/75DF rate varies with soil organic matter: the higher the organic matter the higher the rate of Sensor required.

- On all soils with 2-3% organic matter, use 550 mL/ha 500F, or use 375 g/ha 75DF.
- On all soils with 3-6% organic matter, use 700 mL/ha 500F, or use 475 g/ha 75DF.
- On all soils with 6-10% organic matter, select a rate in the range of 700-850 mL/ha 500F or use 475-550 g/ha 75DF according to soil organic matter.
- On all soils with 10% organic matter or greater, use 850 mL/ha, or use 550 g/ha 75DF.

** On soils where wild oat infestation is heavy in soils with high organic matter content (i.e., 6-15%) use the 3.0 L/ha rate of Treflan E.C.

NOTE:

1. On variable soils with light sandy areas, some injury may occur on the sandy areas if the rate used is for the heavier soil type in the field.
2. Do not use on soils with less than 2% organic matter.
3. On soils with 10% organic matter and higher, broadleaf weed control may not be adequate.
4. Uneven application or improper soil incorporation of TREFLAN E.C. and Sencor may result in erratic weed control or crop injury depending on rate used.
5. Stress conditions such as seedling disease, cold weather, deep planting, excessive moisture, high salt concentration or drought may weaken rapeseed seedlings and increase the possibility of damage from

TREFLAN E.C. and Sencor. Temporary lightening in colour may occur on the margins of cotyledons and a slight delay in crop development may be observed. This is quickly outgrown and usually has no lasting effect.

6. THIS TREATMENT FOR USE ONLY ON TRIAZINE-TOLERANT RAPESEED (T.T. Canola). NON-TRIAZINE-TOLERANT RAPESEED WILL BE KILLED BY THIS COMBINATION.

IMPORTANT: Rotation crops, such as onions, celery, peppers, cole crops, lettuce and spinach, sugar beets, table beets and turnips, pumpkin and squash, cucumbers and melons, tobacco and rapeseed (Non-Triazine-Tolerant) are sensitive to Sencor and may be injured if planted in soil treated with Sencor during the year of application and following crop year. After harvest, tillage practices that provide thorough mixing of the soil may be helpful in reducing the chance of injury to succeeding crops. Do not use this product on Triazine-Tolerant Rapeseed grown in muck soils. (If Sencor is applied to muck soils, subsequent crops may be injured.)

As a precaution oats, sugar beets, and small-seeded annual grasses such as Timothy, Canary Seed Grass and Creeping Red Fescue, should not be grown in rotation following a TREFLAN E.C. treated crop.

TREFLAN E.C. PLUS A REGISTERED POSTEMERGENT TRIAZINE HERBICIDE FOR TRIAZINE TOLERANT RAPESEED (T.T. CANOLA)

NOTE: THIS TREATMENT FOR USE ONLY ON TRIAZINE-TOLERANT RAPESEED (T.T. CANOLA). NON-TRIAZINE-TOLERANT RAPESEED WILL BE KILLED BY THIS COMBINATION.

TREFLAN E.C. may be applied in the summer, fall and spring for Triazine-Tolerant Rapeseed or Canola). A postemergence triazine herbicide registered for this use may then be applied after crop emergence to control several additional weeds. The registered products include Bladex and Sencor. Refer to individual labels of the postemergence herbicides for specific recommendations and follow warnings and precautions as stated.

TREFLAN E.C. USE FOR SOYBEANS

- For TREFLAN E.C. on soybeans refer to Treflan Use for Oilseeds and Special Crops. A tank-mix combination of Treflan + Amiben or Treflan + Sencor may be used for weed control in soybeans.
- For TREFLAN E.C. + Amiben refer to Treflan Use for Sunflowers.
- For TREFLAN E.C. plus Sencor, refer to Treflan Use on Triazine Tolerant Canola. Follow all directions and precautions.

NOTE: Do not plant soybean varieties Ace, Apache, Baron, Maple Amber,

Maple Ridge, Nottawa or Portage on areas treated with Sencor as unacceptable injury may result.

TREFLAN E.C. USE FOR WHEAT AND BARLEY:

POSTPLANT INCORPORATED

(HARROWED IN AFTER SEEDING)

Crops Registered

Hard Red Spring Wheat	Durum Wheat
Soft White Spring Wheat	Barley

Weeds Controlled

Wild Millet (Green* & Yellow Foxtails)

*TREFLAN E.C. will not control trifluralin tolerant Green Foxtail. See specific recommendations in WARNING section of the label.

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 and barley for the control of Wild Millet (Green and Yellow Foxtail). Weed control is achieved by establishing a shallow (2 cm), treated layer of TREFLAN E.C. near the soil surface. Within this layer, TREFLAN E.C. controls weed seeds by killing them as they germinate. Generally, the majority of wild millet seeds germinate from this depth. However, in some years due to climatic conditions, wild millet may germinate from a deeper depth. Consequently, deep-seeded wild millet seeds germinating below the TREFLAN E.C. layer may not be controlled. Crop safety is maintained since the wheat and barley seeds are located in the untreated soil beneath the TREFLAN E.C. layer.

LAND PREPARATION

Plant your wheat and barley as you formally do. Wheat and barley should be seeded to a depth 5-8 cm in a Well-tilled seedbed.

APPLICATION & INCORPORATION

TREFLAN E.C.

(Harrowed in after seeding)

RATE PER HECTARE

	Soil Texture	
	Light-Medium	Heavy
TREFLAN E.C.	1.1 L/ha 7.5 ha/jug 18.6 acres/jug	1.5 L/ha 5.5 L/ha 13.7 acres/jug

1. 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 (broad cast basis using any properly calibrated low-pressure herbicide sprayer. Check the sprayer daily to ensure proper calibration and uniform application.
2. Apply TREFLAN E.C. as soon as possible after seeding and before crop emerges.
3. Apply TREFLAN E.C. to soil surface which is free of trash or was followed the previous year TREFLAN E.C. should not be sprayed or incorporated when the soil is crusted, lumpy, or too wet for good mixing action.
4. Application and the first incorporation should be done in the same operation if possible. Incorporate to a shallow depth with diamond harrows or tyne harrows in two different directions at speeds of 8-11 km/hr. Both incorporations must be done within 24 hours of application of TREFLAN E.C.. Uneven incorporation may result in some wild millet escapes in the bottom of furrows left by the last row of the harrows if the depth of the TREFLAN treated layer in these troughs is not sufficient to prevent emergence of wild millet. To obtain a more uniform layer of treated soil, operate tyne harrows inclined at least 45 degrees backwards and harrow at a speed which minimizes the amount of soil ridging by the harrows.

CAUTION: 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 seedlings 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 and Yellow Foxtail).

TREFLAN E.C. PLUS AVADDEX BW(R) (TANK-MIX):

POSTPLANT INCORPORATED

(HARROWED IN AFTER SEEDING)

Crops Registered

Wheat Barley

Weeds Controlled

Wild Millet (Green* & Yellow Foxtail)

Wild Oats

*TREFLAN E.C. will not control trifluralin tolerant Green Foxtail. See specific recommendations in WARNING section of the label.

LAND PREPARATION

Seed crop before application. Seed wheat/barley to depth of 5-8 cm using conventional seeding implement.

APPLICATION/INCORPORATION

TREFLAN E.C. Plus Avadex BW (Tank-mix):

		RATE PER HECTARE	
		Soil Texture	
		Light-Medium	Heavy
Barley	TREFLAN E.C.	1.1 L/ha	1.5 L/ha
	Avadex BW	4.25 L/ha	
Wheat	TREFLAN E.C.	1.1 L/ha	1.5 L/ha
	Avadex BW	3.5 L/ha	

1. Apply and soil incorporated TREFLAN E.C. plus Avadex BW in a tank-mixed combination in the spring after planting and prior to emergence of wheat or barley.
2. 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.
3. Application should be confined to fields which are trash-free or were

followed during the previous year.

TREFLAN E.C. PLUS AVENGE, CARBYNE OR MATEVAN: SEQUENTIAL APPLICATION

Crops Registered

Barley Wheat

Weeds Controlled

Wild Millet(Green* & Yellow Foxtail)

Wild Oats

*TREFLAN E. C. will not control trifluralin tolerant Green Foxtail. See specific recommendations in WARNING section of the label.

APPLICATION

For wild millet(green & yellow foxtail) control with Treflan, refer to TREFLAN E.C.. Use for Wheat and Barley.

After an application of Treflan used for wild millet (green and yellow foxtail) control, a post-emergent application of Avenge*, Carbyne* (Barban), or Matevan* may be used for wild oat control in wheat and barley.

For instructions on how to use Avenge, Carbyne or Matevan, refer to their specific labels.

TREFLAN E.C. USE FOR STRAWBERRIES AND ESTABLISHED ASPARAGUS

Strawberries:

Apply TREFLAN E.C. prior to planting transplanted strawberries. Follow recommended soil preparation, application and incorporation procedures for TREFLAN E.C.. Apply only in the spring. Do not exceed the maximum application rate of 2.0 L/ha. Over-application may delay establishment of runner plants.

Asparagus: (Established three years)

Follow recommended soil preparation, application and incorporation procedures for TREFLAN E.C.. Apply to established asparagus in the early spring after ferns are removed but before spear emergence. Or apply after harvest in the late spring or early summer before ferning begins.

CAUTION: Set implements so asparagus crowns are not injured during soil

preparation and incorporation.

RECOMMENDED RATES OF TREFLAN E.C. (LITRES PER HECTARE)		SOIL TEXTURE		
		Light	Medium-Heavy	
Crop	Soil Zones and Soil Organic Matter	Sand Sandy Loam	Loam Silt Loam Silt Sandy Clay	Silty Clay Loam Clay Loam Silty Clay Clay
Strawberries Spring Application Only	Brown, Dark Brown or Black 2-6% Organic	1.5 L/ha	2.0 L/ha	
	Black or Deep Black 6-15% organic matter	2.0 L/ha	2.0 L/ha	
Asparagus - established three years		1.8 L/ha	2.7 - 3.7* L/ha *Use the higher rate for season long weed control	

TREFLAN E.C. USE FOR VEGETABLES

Apply TREFLAN E.C. prior to planting. Follow all recommended soil preparation, application and incorporation procedures for TREFLAN E.C. Apply only in spring.

TREFLAN E.C. USE FOR VEGETABLE CROPS

(SPRING APPLICATION ONLY)

RECOMMENDED RATES OF TREFLAN E.C. (LITRES IN HECTARE)	SOIL TEXTURE	
	Light	Medium-Heavy

Crop	Soil Zones and Soil Organic Matter	Sand Sandy Loam Loam	Loam Silt Loam Silt Sandy Clay Loam	Silty Clay Loam Clay Loam Silty Clay Clay
Carrots Snap beans common Rutabaga Tomatoes	Brown Dark Brown or Black 2-6% O.M.	1.5 L/ha		2.0 L/ha
Broccoli** Brussel Sprouts** Cauliflower* Cabbage*	Black or Deep Black 6-15% O.M.	2.0 L/ha		2.0 - 2.6 L/ha***
* Direct seeded or transplanted. ** Transplants only *** Use the 2.6 L/ha rate for heavy wild oat infestations (Cole crops only)				

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- (R)Sencor is a registered trademark of Bayer AG.
- (R)Avadex BW is a registered trademark of Monsanto Company, U.S.A.
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