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Ambler® - chloranthen, Union Carbide Agricultural Products Co., Inc.	
Caparol® - prometryn, Ciba Geigy Corporation	
Cotor® - thimeturon, Ciba Geigy Corporation	
Eplam® - EPIC, Stauffer Chemical Company	
Fan-Go® - triakate, Monsanto Agricultural Products Company	
Karmex® - duron, E. I. duPont de Nemours and Company	
Lexone® - metribuzin, E. I. duPont de Nemours and Company	
Sencor® - metribuzin, Bayer, GmbH	
Vernam® - vernolate, Stauffer Chemical Company	

DIRECTIONS FOR USE

TREFLAN is a preemergence herbicide which is incorporated into the soil to provide long-lasting control of many annual grasses and broadleaf weeds. TREFLAN controls weeds as they germinate. TREFLAN will not control established weeds.

WEEDS AND GRASSES CONTROLLED BY TREFLAN

GRASSES	
Annual bluegrass	(<i>Poa annua</i>)
Barnyardgrass	(<i>Echinochloa</i> sp.)
(Watergrass)	
Brachiaria	(<i>Brachiaria</i> sp.)
(Signalgrass)	
Bromegrass	(<i>Bromus tectorum</i>)
(Cheatgrass)	
(Downy brome)	

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Cheat (*Bromus secalinus*) 6
 (Chess)
 Crabgrass (*Digitaria spp*)
 (Large crabgrass)
 (Smooth crabgrass)
 Foxtail (*Setaria spp*)
 (Bottlegrass)
 (Bristlegrass)
 (Giant foxtail)
 (Green foxtail)
 (Foxtail millet)
 (Pigeongrass)
 (Robust foxtail)
 (Yellow foxtail)
 Goosegrass (*Eleusine indica*)
 (Silver crabgrass)
 (Silvergrass)
 (Wiregrass)
 (Yardgrass)
 Johnsongrass (from seed) (*Sorghum halepense*)
 (Rhizome—see page 15 for special instructions for control in cotton and see page 23 for special instructions for control in soybeans)
 Junglerice (*Echinochloa colonum*)
 Panicum
 Fall panicum (*Panicum dichotomiflorum*)
 (Spreading panicgrass—see page 15 for special instructions in cotton and see page 21 for special instructions in soybeans)
 Guineagrass (*Panicum maximum*)
 (See page 45 for special instructions)
 Texas panicum (*Panicum texanum*)
 (Buffalograss)
 (Coloradograss)
 Lichgrass (*Rottboellia exaltata*)
 (Raoulgrass)
 (See page 46 for special instructions)

Red rice (*Oryza sativa*)
 See page 22 for suppression or partial control directions)
 Sandbur (*Cenchrus incertus*)
 (Burglass)
 Sprangletop (*Leptochloa filiformis*)
 Stinkgrass (*Eragrostis cilianensis*)
 (Lovegrass)
 Wild cane (*Sorghum bicolor*)
 (Shattercane)
 (See page 26 for special instructions)
 Woolly cupgrass (*Eriochloa villosa*)
BROADLEAF WEEDS
 Carpetweed (*Mollugo verticillata*)
 Chickweed (*Stellaria media*)
 Field bindweed (*Convolvulus arvensis*)
 (See page 50 for special instructions)
 Florida pusley (*Richardia scabra*)
 (Florida purslane)
 (Mexican clover)
 (Pusley)
 Goosefoot (*Chenopodium hybridum*)
 Henbit (fall application only) (*Lamium amplexicaule*)
 Knotweed (*Polygonum aviculare*)
 Kochia (*Kochia scoparia*)
 (Fireweed)
 (Mexican fireweed)
 Lambsquarters (*Chenopodium album*)
 Pigweed (*Amaranthus spp*)
 (Carelessweed)
 (Prostrate pigweed)
 (Redroot)
 (Rough pigweed)
 (Spiny pigweed)

Puncturevine (Western U.S. only) (Callotop) (Goathead)	(<i>Tribulus terrestris</i>)	8
Purslane	(<i>Portulaca oleracea</i>)	
Russian thistle (Tumbleweed)	(<i>Salsola kali</i>)	
Stinging nettle (Nettle)	(<i>Urtica dioica</i>)	

SOIL PREPARATION

Crop Residues or Existing Weeds: Ground cover, such as crop residues or existing weeds, can interfere with the incorporation of TREFLAN into the soil. A manageable level of such ground cover will allow the TREFLAN to be uniformly incorporated into the top 2 to 3 inches of soil. If the level of the ground cover is such that this cannot be done, you must till the soil prior to the application of TREFLAN.

Roughness: The soil surface should be smooth enough so that you can operate a sprayer and incorporation equipment efficiently and at speeds which insure a uniform application and incorporation of TREFLAN.

General Soil Conditions: To assure uniform incorporation of TREFLAN, soil moisture conditions should be such that large clods can be broken up during the incorporation process.

SOIL TEXTURE GUIDE

The amount of TREFLAN you apply will vary with the soil texture and organic matter. A fine textured soil will require more TREFLAN per acre than a coarse soil. Choose the proper rate for each application based on the following soil texture group and specific crop recommendations. Do not exceed recommended rates.

Soil Texture	Soil Classification
Coarse Soils (Light)	Sand, loamy sand, sandy loam
Medium Soils	Loam, silty clay loam*, silt loam, silty sandy clay loam*
Fine Soils	Clay, clay loam, silty clay loam*, silty clay, sandy clay, sandy clay loam*

*Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium or fine textured soils. If silty clay loam or sandy clay loam soils are predominately sand or silt, they are usually classified as medium textured soils. If they are predominately clay, they are usually classified as fine textured soils.

MIXING AND APPLICATION DIRECTIONS

TREFLAN E.C. Alone in Water

Start with a clean spray tank. Fill sprayer $\frac{1}{4}$ to $\frac{1}{2}$ full with clean water. Start agitation. Add correct quantity of TREFLAN, continue agitation and finish filling the tank.

TREFLAN E.C. Tank Mix in Water

Vigorous, continuous agitation is required for all tank mixes. (Sparger pipe agitators generally provide the best agitation in spray tanks). Avoid stirring or splashing air into the mixture during filling to prevent foaming. To do this, place the end of the fill pipe below the surface of the water in the spray tank. Do not allow the mixture to siphon back into the water source.

Mixing order: Fill the tank $\frac{1}{4}$ to $\frac{1}{2}$ full with clean water. Start the agitation. Add dry flowables, wettable powders (WP), aqueous suspensions (AS), flowables (F), and liquids (L) to the water and agitate until the product(s) are completely dispersed in the water. Allow additional mixing and dispersion time when using dry flowable products. Continue agitation and fill tank to $\frac{1}{4}$ full, add the TREFLAN E.C., mix thoroughly. Then add any solution (S) formulations, agitate and finish filling. Maintain agitation during filling and through application. If spraying and agitation

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must be stopped before the tank is empty. The materials may settle to the bottom. In this case, it is important to resuspend all of the material in the bottom of the tank before continuing the spray application. A sparger agitator is particularly useful for this purpose. Sometimes it is more difficult to resuspend settled material than it is to suspend it originally.

Read and carefully follow all label instructions for each material added to the tank. Premixing dry and flowable formulations with water (slurrying) and pouring the slurry through a 20 or 35 mesh wetting screen in the top of the tank will help assure good initial dispersion in the tank water. Line screens in the tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh).

If you see a buildup of material on the walls of the spray tank, wash the tank with soapy water between fillings. Rinse and continue the spraying operation. Clean the tank, lines, and screens thoroughly after use.

As the spray volume decreases, the importance of accurate calibration and uniform application increases. Check the sprayer daily to insure proper calibration and uniform application. Do not apply TREFLAN when the wind can cause drifting of spray particles which can result in non-uniform application. TREFLAN should not be applied to soils which are wet or are subject to prolonged periods of flooding as poor weed control may result.

Ground application: Apply TREFLAN in 5 to 40 gallons of water or liquid fertilizer per acre (broadcast basis), using any properly calibrated, low pressure herbicide sprayer that will apply the spray uniformly.

Aerial application: Apply TREFLAN in 5 to 10 gallons of water or liquid fertilizer per acre. Adjust pump pressure, nozzle arrangements, speed and height to provide a uniform application to the soil surface. Use swath markers or flagmen to assure proper application spray widths.

INCORPORATION DIRECTIONS

Incorporation Equipment—General Directions

Use incorporation equipment that mixes TREFLAN into the top 2 to 3 inches of the final seedbed, or erratic weed control and/or crop injury may result. Incorporation equipment such as a disc will mix TREFLAN approximately half as deep as the equipment is set to operate. For example, a disc set to cut 4 inches deep will incorporate most of the TREFLAN within the top 2 inches of soil.

Incorporation Before Planting

TREFLAN must be incorporated one time within 24 hours after application. Then any time prior to planting, a second incorporation is necessary, this time running the equipment in a different direction from the first. You should incorporate the TREFLAN uniformly into the top 2 to 3 inches of the final seedbed.

Incorporation After Planting

Check specific crop for incorporation directions after planting.

Incorporation In Bedded Culture

For effective weed control, TREFLAN needs to be incorporated into the top 2 to 3 inches of the final seedbed.

Application prior to bedding: Apply TREFLAN and incorporate it one time with recommended equipment. The bedding operation serves as the second incorporation. Do not expose untreated soil during post-bedding operations.

Application after bedding: Knock off beds to planting height before applying TREFLAN. Apply TREFLAN and incorporate it with recommended equipment that will conform to the bed shape. Do not leave untreated soil exposed.

**Avoid removal of untreated soil from the seedbed before or during the planting operation. This would expose untreated soil, allowing weeds to germinate in the drill row.*

Recommended Equipment

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Any recommended incorporation tool may be used alone or in combination with any other recommended tool. Two incorporation passes are required unless specifically stated. The second incorporation should not be deeper than the first.

Disc: set to cut 4 to 6 inches deep and operate at 4 to 6 mph.

Field Cultivator: set to cut 3 to 4 inches deep and operate at 5 mph or more. A field cultivator is defined as an implement with 3 to 4 rows of sweeps, spaced at intervals of 7 inches or less and staggered so that no soil is left unturned. Chisel points should not be used.

Combination Seedbed Conditioners: set to cut 3 to 4 inches deep and operate at a speed of at least 5 mph. These implements are defined as three or more tillage devices combined and used as a single tool. For example, 2 to 3 rows of field cultivator C- or S-shaped shanks with an effective sweep spacing of 6 to 9 inches (staggered so that no soil is left unturned), followed by a spike-tooth or flexline harrow, followed by a ground-driven reel or basket.

Rolling Cultivator: set to cut 2 to 4 inches deep and operate at 6 to 8 mph. Rolling cultivators are adequate for use on coarse and medium textured soils only, except when used in sugarcane where the rolling cultivator may be used on fine textured soils.

Bed Conditioner (Do-All): set to cut 2 to 4 inches deep and operate at 4 to 6 mph. The do-all is adequate for use on coarse and medium textured soils only. When using the do-all in bedded culture, only one incorporation pass is required. However, two passes with a do-all are required in flat planted culture.

Mulch Treader (other similar disc-type implements): set to cut 3 to 4 inches deep and operate at 5 to 8 mph.

P.T.O. Driven Equipment (tillers, cultivators, hoes): adjust to incorporate TREFLAN into the top 2 to 3 inches of

the seedbed with rotors spaced to provide a clean sweep of the soil. Only one incorporation is necessary. P.T.O. driven equipment should not be operated at a speed greater than 4 mph.

Other equipment, including the flexible line-tooth harrow (Flexline, Melroe), is also recommended but only for the special programs for which it is specified in this label.

CULTIVATION AFTER PLANTING

Soil treated with TREFLAN may be shallow cultivated without reducing the weed control activity of TREFLAN. 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 the broadcast rates of TREFLAN per acre. For band applications, decrease the amount of TREFLAN in proportion to the amount of surface treated per acre. Apply any time after January 1 when the soil can be worked and is suitable for good incorporation. TREFLAN can be applied in the fall—see specific crop for recommendations. For general fall application directions where specific recommendations are not given, see page 53. Where a rate range is shown, use the lower rate for coarser soils or soils with lower organic matter. TREFLAN should not be used on soils containing more than 10% organic matter.

COTTON—TREFLAN ALONE

TREFLAN can be applied and incorporated before or at planting, immediately after planting, or at layby.

**COTTON—Preemergence:
Broadcast Rates Per Acre**

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Soil Texture	TREFLAN E.C.	
	Areas receiving less than 20" average annual rainfall*	Areas receiving greater than 20" average annual rainfall*
	(pints)	(pints)
Coarse	1	1
Medium	1½-1½	1½
Fine	1½	2

*Use 1½ pints per acre on coarse and medium textured soils and 2 pints on fine soils with 2-5% organic matter; use 2 to 2½ pints on all soils with 5-10% organic matter.

COTTON—Postplant:

When incorporating TREFLAN after planting (postplant), be careful not to disturb the seed.

COTTON—Layby:

Apply and incorporate TREFLAN any time up to layby, but not less than 90 days before harvest. Direct the layby applications onto the soil between the rows and beneath emerged cotton plants. Use the same rates as for a preemergence application.

COTTON—Fall Application:

Apply and incorporate TREFLAN any time between October 15 and December 31. The ground may be left flat or bedded-up over winter. On bedded ground, knock beds down to desired height before planting, moving some treated soil from beds into furrows. Where soil is left flat over winter, be careful not to turn up untreated soil during spring bedding operations. Destroy established weeds during seedbed preparation. If weeds become established in furrows due to uncovering of untreated soil during bedding, destroy these weeds before planting. In the fall, do not apply TREFLAN to soils which are wet or subject to prolonged periods of flooding.

Broadcast Rates per Acre—Fall application only:

In Alabama, Arkansas, northern Florida, Georgia, Louisiana, Mississippi, southeastern Missouri, North Carolina, New Mexico, Oklahoma, South Carolina, Tennessee and Texas, apply and incorporate TREFLAN at a broadcast rate of 2 pints per acre on coarse and medium soils and 2½ pints on fine soils.

In Arizona, California and Nevada, apply and incorporate TREFLAN at a broadcast rate of 1½ pints per acre on coarse soils; 2 pints on medium soils, and 2½ pints on fine soils.

For cotton grown in other states, apply and incorporate TREFLAN at a broadcast rate of 1 pint per acre on coarse soils; 1½ pints on medium soils; 2 pints on fine soils, 1½ pints on coarse soils with 2-5% organic matter; and 2 to 2½ pints on soils with 5-10% organic matter.

COTTON—SPECIAL USE DIRECTIONS

COTTON—Fall panicum:

Apply and incorporate TREFLAN at the broadcast rate of 2 pints per acre on both coarse and medium soils.

COTTON—Rhizome johnsongrass:

In all cotton-producing states except Arizona and California, you can obtain commercially acceptable control of rhizome johnsongrass with a double rate program which you apply for 2 consecutive years in accordance with the following directions.

Soil Preparation—Proper preparation of the soil before application is very important for satisfactory results. Use a chisel plow or similar implement to bring rhizomes to the top of the soil. Then follow with a disc two times before application to cut the rhizomes into small (2 to 3 inch) pieces. This should also destroy any emerged johnsongrass.

Application—Choose the one application program that best fits your cultural practices.

Spring Application—Apply TREFLAN any time before planting in the spring for 2 years in a row. Use a broadcast

rate of 2 pints per acre on coarse soils, 3 pints on medium soils; and 4 pints on fine soils.

OR

Fall Application—Apply TREFLAN between October 15 and December 31 for 2 years in a row at the same rates as a spring application for the control of rhizome johnsongrass.

Incorporation—Deep incorporation is essential for good rhizome johnsongrass control. Incorporate TREFLAN thoroughly with a disc set to cut 4 to 6 inches deep and operate at 4 to 6 mph. Two passes are necessary, with the second pass in a different direction from the first.

Cultivation—Some johnsongrass plants will escape. Timely cultivations during the crop season to remove escaped plants are necessary to obtain commercially acceptable control. You cannot obtain commercially acceptable control with only 1 year of double rate TREFLAN use.

Crop Rotation—In the season following a double rate treatment, plant only rice and those crops for which TREFLAN can be applied as a preplant treatment or injury may result.

COTTON—Pigweed and seedling johnsongrass control: In Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, southeastern Missouri, North Carolina, South Carolina, Tennessee and southern Virginia, TREFLAN may be applied preplant at a broadcast rate of 1 to 1½ pints per acre on coarse soils; 1½ to 2 pints on medium soils; and 2 pints on fine soils. Exception: in the State of Louisiana, 3 pints per acre are recommended on fine soils.

COTTON—Additional weed and grass control (Texas Gulf Coast):

In the Texas Gulf Coast counties of Brazoria, Calhoun, Chambers, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller and Wharton, TREFLAN may be applied up to 2 weeks before planting at a broadcast rate of 1½ pints per acre on coarse soils, 2 pints on

medium soils, and 3 pints on fine soils.

COTTON PRECAUTIONS: Cotton should be planted after early season adverse weather conditions have passed, especially when using higher rate programs. Cool, wet weather early in the growth cycle causes additional stress to the cotton plant. This may result in reduced stands, delayed maturity and reduced yields.

COTTON—TANK MIXES AND OVERLAYS

Follow recommended soil preparation and incorporation procedures for TREFLAN.

COTTON—TREFLAN/Caparol tank mix for cotton grown in California, Arizona, New Mexico and west Texas:

The TREFLAN/Caparol combination will control certain grasses and broadleaf weeds listed for TREFLAN alone plus the following weeds:

Smartweed	Groundcherry (Annual)
Prickly sida (Teaweed)	Mustard
Annual morningglory	Malva
Ragweed	Wild oat

The tank mix also controls shallow germinating seedlings of cocklebur and coffee weed.

Broadcast Rates Per Acre

Soil Texture	TREFLAN E.C.	Caparol 80W
	(pints)	(pounds)
Coarse	1	2*
Medium	1½-1½	2½
Fine	2	2¾

*Do not use on sands and loamy sands. For band applications use proportionately less.

Mixing Directions: Carefully follow the procedures on the Caparol 80W label for making a slurry and adding it to a partially filled tank of water. After the Caparol is thoroughly mixed with the partially filled tank of water, add the TREFLAN E.C. and continue filling. Agitate continuously during the filling and spraying operation.

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Avoid leaving the spray mixture in the tank without constant agitation. If bypass agitation is used, the bypass line should stop at the bottom of the tank to minimize foaming.

Additional Precautions: The combination of TREFLAN/Caparol should not be used in low cut areas of newly leveled fields, in areas of excess salt, or where flooding over the beds is likely to happen. Do not plant cotton in tractor wheel depressions. These conditions may cause crop injury. On mulch-planted cotton, water back only after cotton seedlings are well established.

Crop Rotations: Cabbage, okra, onions and peas may be planted in the fall after a spring application of TREFLAN plus Caparol. Winter barley, winter rye and winter wheat can be planted in the fall also, if they are plowed down and not used for food or feed. Refer to the Caparol label for directions, cautions and precautions.

COTTON—TREFLAN/Cotoran tank mix (except in Arizona and California):

Follow recommended soil preparation and incorporation procedures for TREFLAN.

The TREFLAN/Cotoran tank mix effectively controls all the annual grasses and broadleaf weeds listed for TREFLAN alone plus these additional weeds:

Ryegrass	Prickly sida (Teaweed)
Buttonweed	Ragweed
Cocklebur	Sesbania
Groundcherry, Wright	Sicklepod
Jimsonweed	Smartweed
Morningglory	Tumbleweed

Broadcast Rates Per Acre

Soil Texture	TREFLAN E.C. (pints)	Cotoran 80W (pounds)
Coarse	1	1½
Medium	1½	2
Fine	2	2½

Mixing Directions: Carefully follow the procedures on the Cotoran label for making a Cotoran slurry and adding it to a partially filled tank of water. After the Cotoran is thoroughly mixed with the partially filled tank of water, add the TREFLAN and continue filling. Agitate continuously throughout the filling and application operations. Do not leave spray mixture in tank without constant agitation. If bypass agitation is used, the bypass line should stop at the bottom of the tank to minimize foaming. Apply in 15-40 gallons of water per acre.

Additional Precautions: Do not plant crops other than cotton on the treated land within 6 months after the application of TREFLAN plus Cotoran, or crop injury may result. Do not feed foliage from treated cotton plants or gin trash to livestock. Do not mix TREFLAN plus Cotoran with liquid fertilizer.

West Texas Only: Do not use the tank mix of TREFLAN plus Cotoran on sandy, loamy sand or fine sandy loam soils. Do not use on cotton planted in furrows.

Arkansas, Louisiana, and Mississippi Only: Use 1 pound Cotoran 80W in tank mix with TREFLAN on sandy loam soils low in organic matter.

New Mexico: Do not plant treated land with crops other than cotton until 1 year after the last application. Do not use on sandy or coarse textured soils of less than 1% organic matter.

COTTON—TREFLAN preplant followed by Cotoran overlay:

Apply and incorporate TREFLAN as recommended for the specific soil texture. Then apply Cotoran as a preemergence surface treatment at 1½ to 2½ pounds per acre. On light silt and sandy soils low in organic matter, use the lower rate.

Additional Precaution: Refer to the Cotoran label for all cautions and precautions when using this preemergence surface treatment.

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**COTTON—TREFLAN preplant followed by Karmex over-
lay:**

For cotton grown east of the Mississippi River plus Arkansas, southeastern Missouri, Louisiana and Eastern Texas, incorporate TREFLAN before planting. Then follow with a preemergence application of Karmex. This will effectively control all the weeds controlled by TREFLAN alone plus these additional weeds:

Ragweed	Shepherdspurse
Annual groundcherry	Velvetgrass
Dogfennel	Wild lettuce
Pennycress	Wild mustard
Annual morningglory	

Broadcast Rate Per Acre

Soil Texture	TREFLAN E.C. (pints)	Karmex 80W (pounds)
Coarse	1	1
Medium	1½	2
Fine	2	1

Additional Precautions: Do not use Karmex on soils with less than 1% organic matter as crop injury may result. Do not allow livestock to graze on cotton treated with Karmex. Consult the Karmex label for additional instructions, cautions and precautions.

SOYBEAN—TREFLAN ALONE

SOYBEAN—Preemergence:

Follow recommended soil preparation, application, and incorporation procedures for TREFLAN.

Broadcast Rates Per Acre

Soil Texture	TREFLAN E.C. (pints)
Coarse	1
Medium	1½
Fine	2

*Use 1½ pints per acre on coarse and medium textured soils and 2 pints on fine soils with 2-5% organic matter, use 2-2½ pints on all soils with 5-10% organic matter.

SOYBEAN—Fall Application:

Apply and incorporate TREFLAN anytime between October 15 and December 31. Ground may be left flat or bedded-up over winter. On bedded ground, knock beds down to desired height before planting, moving some treated soil from tops into furrows. Where soil is left flat over winter, take care during spring bedding operations to prevent turning up untreated soil. Destroy established weeds during seedbed preparation. If weeds become established in furrows due to uncovering of untreated soil during listing, destroy these weeds before planting. Do not fall apply TREFLAN to soils which are wet, are subject to prolonged periods of flooding, or where rice was grown the previous year.

For soybeans grown in Alabama, Arkansas, northern Florida, Georgia, Louisiana, Mississippi, southeastern Missouri, North Carolina, Oklahoma, South Carolina, Tennessee and Texas, apply and incorporate TREFLAN at a broadcast rate of 2 pints per acre on coarse and medium soils and 2½ pints on fine soils.

For soybeans grown in states other than those listed above, apply and incorporate TREFLAN at a broadcast rate of 1 pint per acre on coarse soils; 1½ pints on medium soils; 2 pints on fine soils; 1½ pints on coarse soils with 2-5% organic matter, and 2 to 2½ pints on soils with 5-10% organic matter.

SOYBEAN—SPECIAL USE DIRECTIONS

SOYBEAN—Fall panicum:

Apply TREFLAN at the broadcast rate of 2 pints per acre on both coarse and medium soils.

SOYBEAN—Pigweed and seedling johnsongrass:

In Alabama, Arkansas, Florida, Georgia, Kansas, Louisiana, Mississippi, southeastern Missouri, North Carolina, Oklahoma,

South Carolina, Tennessee and southern Virginia, TREFLAN may be applied at a broadcast rate of 1 to 1½ pints per acre on coarse soils; 1½ to 2 pints on medium soils, and 2 pints on fine soils. Exception: in the state of Louisiana, 3 pints per acre are recommended on fine soils.

SOYBEAN—Additional weed and grass control (Texas Gulf Coast):

In the Texas Gulf Coast counties of Brazoria, Calhoun, Chambers, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller and Wharton, TREFLAN may be applied up to 2 weeks before planting at a broadcast rate of 1½ pints per acre on coarse soils; 2 pints on medium soils, and 3 pints on fine soils.

SOYBEAN—Charcoal soils in Arkansas, Louisiana and Mississippi:

Newly cleared land often contains high organic matter (5-10%) and charcoal from burning debris. This charcoal and/or organic matter tends to bind TREFLAN and reduce its weed control activity. Under these conditions, higher rates of TREFLAN are necessary for weed control. Increased rates, however, can cause crop injury if charcoal or organic matter is not present to bind some of the TREFLAN. In the burn row a high level of charcoal is present, consequently, poor weed control may result even with an increased rate of TREFLAN.

Apply TREFLAN at the broadcast rate of 1½ to 2½ pints per acre on coarse soils; 2½ pints on medium soils; and 3 pints on fine textured soils. Follow recommended soil preparation, application and incorporation procedures for TREFLAN.

SOYBEAN—Red rice in Arkansas, Louisiana, Mississippi and Texas only:

You can obtain suppression or partial control of red rice when you apply TREFLAN at the following recommended rates. Follow recommended soil preparation and incorporation procedures for TREFLAN.

Apply and incorporate TREFLAN in the spring before planting

Broadcast Rates Per Acre

Soil Texture	TREFLAN E.C.	
	Application Year 1	Application Year 2
	(pints)	(pints)
Coarse	2	1
Medium	3	1½
Fine	4	2
Coarse soils with 2 to 5% organic matter	3	1½
Soils with 5 to 10% organic matter	4	2-2½

If a combination of high organic matter (5-10%) and charcoal are present in the soil, apply TREFLAN the second year at the following rates for charcoal soils in Arkansas, Louisiana and Mississippi:

Soil Texture	TREFLAN E.C.
	(pints)
Coarse	1½-2½
Medium	2½
Fine	3

For more information on charcoal soil see page 22

Crop Rotation: The program for red rice control in soybeans is a 2-year program. Use the rates listed for first year application and plant soybeans. The second year use the normal TREFLAN rates listed for your soil type and charcoal level and plant only those crops for which TREFLAN has been registered as a preplant treatment, or crop injury may result. Do not plant rice the second year. Rice may be planted the third year.

SOYBEAN—Rhizome johnsongrass:

You can obtain commercially acceptable control of rhizome johnsongrass with a double rate program applied for 2 consecutive years in accordance with the following directions:

Soil Preparation—Proper preparation of the soil before application is very important for satisfactory results. Use a chisel plow or similar implement to bring rhizomes to the top of the soil. Then follow with a disc two times before application to cut the rhizomes into small (2 to 3 inch) pieces and to destroy any emerged johnsongrass.

Application—Choose the one application program that best fits your cultural practices.

Spring Application—Apply TREFLAN anytime in the spring before planting for 2 years in a row. Use a broadcast rate of 2 pints per acre on coarse soils, 3 pints on medium soils, 4 pints on fine soils; 3 pints on coarse soils with 2-5% organic matter, and 4 pints on soils with 5-10% organic matter.

OR

Fall Application—Apply TREFLAN between October 15 and December 31 for 2 years in a row at the same rates as a spring application for the control of rhizome johnsongrass.

OR

Split Application—Apply TREFLAN at the same rate in both the spring and fall for 2 years in a row using the rates in the following table.

Broadcast Rates Per Acre

Soil Texture	TREFLAN E.C.	
	Spring and Fall	
	(pints)	
Coarse	1	
Medium	1½	
Fine	2	
Coarse soils with 2-5% organic matter	1½	
Soils with 5-10% organic matter	2	

Incorporation—Deep incorporation is essential for good rhizome johnsongrass control. Incorporate TREFLAN thoroughly with a disc set to cut 4 to 6 inches deep and operate at 4 to 6 mph. Two passes are necessary, with the second pass in a different direction from the first.

Cultivation—Some johnsongrass plants will escape. Timely cultivations during the crop season to remove escaped plants are necessary to obtain commercially acceptable control.

Crop Rotation—In the season following a double rate treatment, plant only rice and those crops for which TREFLAN can be applied as a preplant treatment or injury may result.

SOYBEAN—Rhizome johnsongrass - TREFLAN/Sencor or TREFLAN/Lexone tank mix.

TREFLAN/Sencor or TREFLAN/Lexone may be used for rhizome johnsongrass control and for the control of those weeds listed for TREFLAN alone. For the additional weeds controlled by Sencor or Lexone in tank mix, see page 26. Follow procedures for soil preparation, incorporation and cultivation recommended in the Soybean - Rhizome johnsongrass section (see page 23).

Apply TREFLAN/Sencor or Lexone up to two weeks before planting for two consecutive years at the following broadcast rates per acre:

Soil Texture	TREFLAN E.C.	Lexone 50WP / 4L or Sencor		Lexone (dry flowable) or Sencor (dry flowable)	
		50WP / 4L or		(dry flowable)	
	(pints)	(pounds/pints)		(pounds)	
Coarse*	2	1		1	
Medium	3	1½		1½	
Fine	4	2		2	

*Do not use on coarse soils with less than 1% organic matter.

Read and follow all additional precautions listed for the TREFLAN/Sencor or TREFLAN/Lexone tank mix (see page 27).

SOYBEAN—Wild cane (shattercane):

Follow recommended soil preparation and application procedures for TREFLAN.

Wild cane (shattercane) can germinate throughout the growing season and from greater soil depth than most other weed seeds. Commercially acceptable control of wild cane can be obtained with the following increased rates of TREFLAN.

Apply TREFLAN at the broadcast rate of 1 pint per acre on a coarse soil, 2 pints on a medium soil, and 2½ pints on a fine textured soil.

Incorporation—Deep incorporation is essential for good wild cane control. Incorporate TREFLAN thoroughly with a disc set to cut 4 to 6 inches deep and operate at 4 to 6 mph. Two passes are necessary, with the second pass in a different direction from the first.

Cultivation—Cultivations during the crop season will also contribute to control.

SOYBEAN PRECAUTIONS: Soybeans should be planted after early season adverse weather conditions have passed, especially when using higher rate programs. Cool, wet weather early in the growth cycle causes additional stress to the soybean plant. This may result in reduced stands, delayed maturity and reduced yields.

SOYBEAN—TANK MIXES AND OVERLAYS

SOYBEAN—TREFLAN/Sencor or TREFLAN/Lexone tank mix:

The TREFLAN/Sencor or TREFLAN/Lexone tank mix effectively controls the annual grasses and broadleaf weeds controlled by TREFLAN alone plus these additional weeds:

Jimsonweed	Ragweed, common
Mallow, Venice	Sesbania, hemp
(Flower-of-an-hour)	Smartweed, Pennsylvania
Mustard, wild	Velvetleaf
Prickly sida	

Control of cocklebur, morningglory and giant ragweed (thistle weed) may be erratic. Control may be improved with timely cultivation. Where cocklebur is a serious problem, an overlay of Sencor or Lexone may be preferred to the TREFLAN/Sencor or TREFLAN/Lexone tank mix.

Follow recommended procedures for soil preparation, incorporation, and cultivation of TREFLAN. Mix according to instructions on page 9. The TREFLAN/Sencor or TREFLAN/Lexone tank mix can be applied from 2 weeks before planting up to planting.

Broadcast Rates Per Acre

Soil Texture	TREFLAN E.C. (pints)	Lexone 50WP / 4L or Sencor 50WP / 4 (pounds, pints)		Lexone (dry flowable) or Sencor (dry flowable) (pounds)	
		+ 50WP / 4 or (dry flowable)			
Coarse*	1				
Medium	1½				
Fine	2				

*Do not use Sencor/Lexone on coarse soils with less than 1% organic matter.

Additional Precautions: Do not plant any crop other than soybeans within 4 months after treatment. Overapplication, uneven application, or improper soil incorporation may result in crop injury, herbicide residue, or erratic weed control. Additional stress factors are seedling disease, cold weather, deep planting, excessive moisture, soil pH over 7.5, high salt concentration, or drought. Any of these may weaken crop seedlings and increase possibility of damage from the tank mix. These additional factors may also delay crop development or reduce yields when Sencor or Lexone is applied. Observe all cautions and limitations on the Sencor and Lexone labels. Do not use the foliage from soybeans treated with the TREFLAN/Sencor or TREFLAN/Lexone tank mix for feed or forage.

with comments
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ELANCO

ID 5011

Treflan
Herbicide
E.C. TM

Complete Directions For Use,
Use Warnings, Precautions
and Special Precautions,
Tank-Mix Recommendations

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