TABLE 12PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR CynexDF + ZORIAL RAPID 80 ON COTTON						
Soil Texture	Pounds/Acre Cynex DF +	Pounds/Acre ZORIAL RAPID 80				
Coarse Soils** Sandy loam	0.6	0.8				
Medium Soils Silt and Silt Ioam	0.7	1.0				
Loam, Clay Ioam, Sandy clay Ioam, Sandy clay	1.0	1.3				
Fine Soils Silty clay loam, Silty clay, Clay	1.3	1.6				

\*The soil must contain at least 1% organic matter.

\*\*Do not use on coarse soils (Sands and Loamy sands) containing more than 70% sand.

# IABLE 13 DIRECTED POSTEMERGENCE APPLICATION RATES PER ACRE FOR Cynex DF ON COTTON BROADCAST BANDED 38" ROW 0.7 - 1.1 lb. 0.2 - 0.4 lb. 0.4 - 0.5 lb. Use the maximum rate when dry or arid conditions exist. 0.4 - 0.5 lb.

The spray mixture should be directed to the soil around the base of the cotton plants. Care should be taken to prevent the spray from striking the cotton leaves as injury will occur. The use of leaf lifters or shields on application equipment is recommended to avoid spraying the cotton foliage.

Cynex DF may be applied directed postemergence and/or layby following a preemergence application of Cynex DF. Apply no more than two directed postemergence and one preemergence application to the same crop in any one year. If Cynex DF is not used preemergence, apply no more than three directed postemergence applications including layby to the same crop in any one year. (In California, apply no more than two directed postemergence applications including layby.) When applied as a layby treatment before weeds emerge, the effectiveness of Cynex DF depends on rainfall or irrigation to move it into the soil. When irrigation water activation is used, every row must be watered and for skip row cotton all treated soil must be irrigated.

Any rotational crop may be planted the fall or spring following any of the treatments in this section providing the soil is plowed or deep disced prior to planting the rotation crop.

Do not apply Cynex DF to cotton in irrigation water.

#### DO NOT GRAZE OR FEED FOLIAGE FROM TREATED AREAS TO LIVESTOCK.

TABLE 14 LAYBY APPLICATION RATES, PER ACRE FOR Cynex DF ON COTTON						
HEIGHT OF COTTON SOIL TEXTURE BROADCAST RATES						
12 inches or more	Coarse	Sandy Ioam, Silt, Silt Ioam,	0.9 16.			
	Medium	Loam, Clay loam, Sandy clay loam, Sandy clay	1.3 lbs.			
	Fine	Silty clay loam, Silty clay and Clay	1.8 lbs.			

TABLE 15 DIRECTED POSTEMERGENCE APPLICATION RATES PER ACRE Cynex DF + MSMA ON COTTON					
Product	Broadcast	Bai	nded 38" Row		
		12" BAND	10" RAND		

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Product	Broadcast	Banded 38" Row		
		12" BAND	19" BAND	
Cynex DF	0.7 - 1.1 lb.	0.2 - 0.4 lb.	0.4 - 0.5 lb.	
. +	+	+	+	
MSMA (4 lb/gal)	4 pints	1.3 pints	2 pints	
or	or	or	or	
MSMA (6.6 lb/gal)	2.4 pints	0.8 pint	1.2 pints	

#### **Cynex DF Applied Alone**

Apply Cynex DF directed-postemergence at the rate shown in Table 13. Apply at layby at the rates for the soil texture indicated in Table 14. Add a nonionic agricultural surfactant suitable for use on growing cotton at the rate of 2 quarts per 100 gallons of spray mixture (or as directed by the manufacturer).

#### **Cynex DF plus MSMA**

Apply a tank-mix combination of Cynex DF plus MSMA plus surfactant after the cotton is 6 inches tall but before it reaches the bloom stage. Apply no more than two applications of this mixture before the first bloom stage. Tank-mix Cynex DF plus MSMA at the rates indicated in Table 15. Add a nonionic surfactant, at the rate of 2 qts./100 gals of spray mixture (or as directed by the manufacturer).

#### GRAIN SORGHUM (MILO) (See the GENERAL INFORMATION section of this label)

Tank-mix combinations of Cynex DF plus atrazine, metolachlor (DUAL), alachlor (LASSO), or propachlor (RAMROD) may be used for selective preemergence weed control in Grain sorghum. In addition, Cynex DF may be used in tank-mix combinations with atrazine, DUAL or LASSO for the control of weeds in early spring, early preplant, 14 to 35 days or more prior to planting grain sorghum. Cynex DF in tank mix combinations may be applied preemergence or early preplant on grain sorghum grown under conventional or conservation tillage systems.

Do not use on forage sorghums. See the appropriate sections of the label for geographic distribution restrictions.

#### WEEDS CONTROLLED BY Cynex DF IN TANK-MIX OR SEQUENTIAL COMBINATIONS WITH OTHER HERBICIDES ON GRAIN SORGHUM (MILO)

Grasses

Cheatgrass Crabgrass Downy brome Green foxtail Stinkqrass (Indian lovegrass) Volunteer Wheat (2) Yellow foxtail

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	Broadleaves	
Annual Morningglory	Lambsquarters	Russian thistle
Carpetweed	Pennsylvania smartweed	Shepherdspurse
Cocklebur (1)	Prostrate pigweed	Sunflower (1)
Common purslane	Prickly lettuce	Tansy and other
Horseweed (marestail)	Ragweed (Common)	mustards
Kochia	Redroot pigweed	Velvetleaf

(1) Under soil moisture and temperature conditions favoring deep germination or other factors that may cause delayed germination, these species may not be completely controlled.

(2) When the herbicide treatment is applied two-weeks or more before planting, weed control of these species may break early if heavy rainfall occurs between application and planting.

#### General Directions For Use On Grain Sorghum

Cynex DF used in tank-mixes with the products listed above should be applied only once per crop season or in split dosage treatments. If replanting of grain sorghum is necessary, it may be planted in soil previously treated with these mixtures. Apply Cynex DF in these tank-mix combinations before the crop has emerged.

**Precautions:** Do not make an additional application of Cynex DF or any product containing cyanazine or crop injury may occur. Heavy rainfall between planting and crop emergence may cause crop injury or stand loss. Rainfall tends to cause excessive concentrations of herbicide in seed furrow, resulting in possible crop injury. Level deep planter marks or seed furrows before application. Do not apply to furrow-planted sorghum.

Sorghum growing under stress caused by minor element deficiency, cold, wet weather or sorghum growing on highly calcareous soil (high pH) may suffer injury including stand reduction. Sorghum subjected to high winds, sand cutting, hail damage, or cold temperatures may be more susceptible to injury from the chemical treatment with possible stand loss. Where crop residues are pressed into the planter slot or any other factor keeps the slot from closing, crop injury or stand reduction may occur, caused by herbicides coming into direct contact with the seed from the spray or by being washed into the slot after a heavy rain.

When using DUAL on sorghum, only CONCEP II safened seed may be used. When using LASSO on sorghum, only SCREEN safened seed may be used.

Early preplant treatments will require a preemergence herbicide treatment other than Cynex DF or 4L at planting, and/or postemergence herbicide in the growing crop to provide required weed control, if the early preplant application is made more than 35 days prior to planting, or if weeds are present at planting time.

#### Wheat/Sorghum/Fallow Rotation

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For sorghum grown under a wheat/sorghum/fallow rotation, Cynex DF plus atrazine may be applied early preplant or preemergence. If an early preplant application with Cynex DF plus atrazine is used, it should be used in conjunction with either a residual herbicide after wheat harvest the previous year, a preemergence herbicide treatment at planting, and/or a postemergence herbicide treatment in the growing crop. The total rate of atrazine permitted in conjunction with a sorghum crop (postharvest plus early preplant plus preemergence) is limited to 3.0 lbs. active ingredient per acre. Even this or lower rates may carry over to injure rotational crops. Rotational Crops: (1) Plant only corn, sorghum, or soybeans the year rollowing the use of this mixture. (2) If soybeans are to be planted, injuity may occur. (3) If applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur. (4) In the high plains and intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use only when corn or sorghum is to be planted the following year, or a crop of corn or sorghum not treated with this mixture or atrazine is to precede other rotational crops. (5) Small grains may be planted 15 months following treatment. (6) All other crops may be planted 18 months after application.

#### **Conservation Tillage**

For grain sorghum grown under conservation tillage, any of the herbicide treatments listed above may be tank-mixed with paraquat, and/or 2,4-D where weeds and grasses are present at the time of application exceeding two inches in height.

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If volunteer wheat or cheatgrass is over 2 inches tall, heavily tillered, and/or growing in a dense mat, or if the wheat stubble has been tilled (undercut or disc) or grazed and seed is buried, complete control may not be achieved. Control of volunteer and other weeds is usually better in complete no-till situations than where prior tillage "Planted" the seed and allowed extensive root development.

Complete spray coverage of the weeds is essential for best performance. Apply the desired treatment in 15 to 30 gallons of spray mixture per acre by ground rig. When using paraquat in a tank-mix, apply the desired rates in 20 to 40 gallons of spray mixture per acre. Use the higher volumes where there are heavy crop residues on the soil surface. Nitrogen solutions are the preferred carriers for these treatments as they aid in the burndown of existing weeds. In addition, crop oil or a nonionic surfactant may be added to the tank-mix as they aid in the burndown of existing weeds.

When tank-mixing with 2,4-D to control broadleaf weeds 14-35 days prior to planting, use 1 to 3 pints per acre of 4 pounds ai per gallon, 2,4-) LV (2/3 to 2 pints of 6 pounds ai per gallon 2,4-D LV) (or 2,4-D Amine at recommended rates). Use the higher rates where overwintering weeds are present or when directed on the 2,4-D label for the control of specific hard-to-kill weed species, such as perennials.

CAUTION: Use only these 2,4-D products with properly registered labels that permit such use and application rates.

When tank-mixing with paraquat to control grass and broadleaf weeds at the time of planting, use an approved nonionic adjuvant at the rate of 1 quart per 100 gallons of dilute spray. Use 1-2 pints of paraquat (2 lbs./gal) or 1.3-2.7 pints (1.5 lbs/gal) per acre. Use the higher rate when weed growth is heavy or over 4 inches tall or when dry weather conditions prevail. Established weeds 6 inches tall or taller may not be completely controlled with paraquat.

OBSERVE ALL CAUTIONS AND LIMITATIONS ON LABELING OF ALL PRODUCTS USED IN MIXTURES.

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#### EARLY PREPLANT

Cynex DF in tank-mix combinations with other herbicides may be applied Early Preplant on grain sorghum only in the states of Kansas, Nebraska and South Dakota. The tank-mixes may be applied on grain sorghum grown under conventional or conservation tillage systems. Do not use on forage sorghum.

#### Cynex DF plus ATRAZINE

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Cynex DF plus atrazine provides control of weeds listed on this label in the Weeds Controlled section for Cynex DF on grain sorghum.

**Precautions:** Crop injury can occur if the soil stays dry between application and planting. Delay planting until at least 10 days after a soaking ran after treatment (soaks the soil to a depth of 4 inches or more). Heavy rains between planting and emergence can cause crop injury or stand loss.

Rotational Crops: Refer to the General Information section of the label. Fields treated with this tank-mix may be planted only to corn or grain sorghum within 12 months after this treatment. Other crops should not be planted for 18 months following this treatment.

Use Cynex DF plus atrazine 4L at the proper rate for soil texture and time interval indicated in Table 16.

Split Applications: Cynex DF plus Atrazine 4L dosage rates in Table 16 may be applied in a split application of 80% of the dosage 21 days or more before planting and the remaining 20% at planting time. If the season has been dry without sufficient rainfall to activate the herbicide after the initial application, the remaining 20% at planting time may be omitted to reduce the chances of crop injury.

#### **Cynex DF IN THREE-WAY COMBINATIONS**

Cynex DF plus atrazine in combination with DUAL or LASSO applied early preplant provides control of weeds listed on this label in the Weeds Controlled section for Cynex DF on grain sorghum. Additional weeds controlled by one of these combinations include:

Grasses

Barnyardgrass (1) Fall Panicum Giant Foxtail

Stinkgrass (2) Witchgrass (2)

(1), (2) Refer to Weeds Controlled section on grain sorghum for explanation.

Rotational Crops: If the crop treated with any of these combinations is lost, corn or grain sorghum may be replanted immediately without retreatment. Refer to the General Information section of the label for additional information regarding crop rotation.

#### Cynex DF plus ATRAZINE plus DUAL

Dual may be used on grain sorghum only with seen treated with CONCEP II seed safener.

Use Cynex DF plus atrazine 4L plus DUAL 8E at the proper rate for soil texture and time interval indicated in Table 17.

#### **Cynex DF Plus ATRAZINE plus LASSO**

LASSO may be used on grain sorghum only with seed treated with SCREEN seed safener.

Use Cynex DF plus Atrazine 4L plus LASSO 4EC at the proper rate for soil texture and time interval indicated in Table 18.

#### PREEMERGENCE OR SHALLOW PREPLANT INCORPORATION

Tank-mix combinations of Cynex DF plus atrazine, metolachlor (DUAL), alachlor (LASSO), propachlor (RAMROD) may be used for selective preemergence weed control in grain sorghum. Cynex DF and its tank mixes may be applied preemergence on grain sorghum grown under conventional or conservation tillage systems. Do not use on forage sorghum.

#### TABLE 16

#### EARLY PREPLANT BROADCAST APPLICATION RATES OF BLADE DF PLUS ATRAZINE 4L ON GRAIN SORGHUM (0.8% TO 3% ORGANIC MATTER SOILS)

	POUNDS OF BLADE DF + QUARTS OF ATRAZINE 4				
SOIL TEXTURE	DAYS PRIOR TO PLANTING (b, c)				
DESCRIPTION	14 DAYS	28 DAYS	35 DAYS		
Sand, Loamy sand		DO NOT USE			
Sandy loam	1.3 + 0.6(a, b)	1.8 + 0.8	2.2 + 1.0		
Loam, Silt loam, Silt	1.7 + 0.7	2.2 + 1.0	2.6 + 1.2		
Sandy clay loam, Clay loam, Silty clay loam	2.2 + 1.0	2.6 + 1.2	2.9 + 1.4		
Sandy clay, Silty clay, Clay	2.4 + 1.1	2.6 + 1.2	3.3 + 1.5		
Peat or Muck		NOT RECOMMEND	ED		
Eroded Slopes or Knobs Soils with pH greater than 8.0	NOT RECOMMENDED				
<ul> <li>(a) The first number is popunds/acre of atrazine</li> <li>(b)For intervals longer that at, or after planting.</li> </ul>	unds/acre of Cynex DF. 80W multiply by 1.25 an 35 days due to delaye	The second number is quarts d planting, etc., another herb	s/acre of atrazine 4L. For		

(c)For sandy loam soils containing less than 1.5% O.M., increase the treatment interval from 14 to 21 days. Use the 14 day interval for sandy soils containing more than 1.5%.

(d)For rates between those listed at 14 and 35 days, adjust the rate proportionately.

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Cynex DF in two-way tank-mix combinations with propachlor or in three-way combinations with atrazine ind propachlor, LASSO or DUAL should be applied only once per crop season or in split dosage treatments: (See the Early Preplant section.) If replanting of grain sorghum is necessary, it may be planted in soil previously treated with these mixtures. Do not make a second application of Cynex DF or any product containing cyanazine or crop injury may occur.

Apply these tank-mix combinations at planting or after planting, but before the crop and weeds have emerged. Heavy rain immediately following application tends to cause excessive concentrations of herbicide in seed furrow and can cause crop injury and stand reduction. Do not apply to furrow-planted sorghum until furrows are leveled (plowed-in). Level deep planter

# TABLE 18EARLY PREPLANT BROADCAST APPLICATION RATES PER ACRE IN POUNDSOF Cynex DF, QUARTS OF ATRAZINE 4L AND QUARTS OF LASSO 4EC ONGRAIN SORGHUM (b)

	DAYS PRIOR TO PLANTING (c) (0.8% TO 3% ORGANIC MATTER)						
SOIL TEXTURE DESCRIPTION	LBS. Cynex	14 DAYS* QTS. ATRAZ/	QTS. LASSO	LBS. Cynex/	28 DAYS QTS. ATRAZ/	QTS. LASSO	
Sand, Loamy sand		DO NOT US	E	1.0(a)	0.45	2.25	
Sandy loam	0.8(d)	0.4	1.8	1.0	0.5	2.25	
Loam, Silt Loam, Silt	1.0	0.5	1.8	1.3	0.6	2.25	
Sandy clay loam, Clay loam, Silty clay loam	1.3	0.6	2.0	1.7	0.75	2.25	
Sandy clay, Silty clay, Clay	1.5	0.7	2.0	1.9	0.8	2.25	
Peat or Muck	NOT RECOMMENDED						
Eroded Slopes or Knobs Soils with pH greater than 8.0	NOT RECOMMENDED						
(a) The first number is pount third number is quarts/acre	ds/acre of C	Cynex DF. The 4EC	second number	is quarts/ac	re of atrazine 4	L. The	

(b) If using LASSO 4EC on sorghum, Screen safened seed should be planted.

(c) For intervals longer than 28 days due to delayed planting, etc., another herbicide treatment is needed before, at, or after planting.

(d) For sandy loam soils containing less than 1.5% O.M., increase the treatment interval from 14 to 21 days. Use the 14 day interval for sandy soils containing more than 1.5%.

\* For rates between those listed at 14 and 28 days, adjust the rate proportionately.

#### Cynex DF plus PROPACHLOR (RAMROD)

#### Weeds Controlled

Apply this tank-mix to grain sorghum only in States East of the Rocky Mountains.

Grasses	Barnyardgrass	Giant foxtail
	Crabgrass	Green foxtail
	Fall panicum	Yellow foxtail

Broadleaves:	Annual morningglory	Pigweed
	Carpetweed	Ragweed (Common) ·

marks or seed furrows before application. Sorghum growing under stress caused by minor element deficiency or cold, wet weather or sorghum growing on highly calcareous soil may suffer injury and stanc loss.

#### TABLE 17

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#### EARLY PREPLANT BROADCAST APPLICATION RATES PER ACRE IN POUNDS OF Cynex DF, QUARTS OF ATRAZINE 4L AND PINTS OF DUAL SE ON GRAIN SORGHUM (b)

	DAYS PRIOR TO PLANTING (c) (0.8% TO 3% ORGANIC MATTER)					
SOIL TEXTURE DESCRIPTION	LBS. Cynex/	14 DAYS <sup>1</sup> QTS. ATRAZ/	PTS. DUAL	LBS. Cynex/	28 DAYS QTS. ATRAZ/	PTS. DUAL
Sand, Loamy sand		-DO NOT USE		1.1(a)	0.5	1.8
Sandy loam	1.0(d)	0.4	1.35	1.2	0.5	1.8
Loam, Silt Loam, Silt	1.2	0.5	1.35	1.5	0.7	1.8
Sandy clay loam, Clay loam, Silty clay loam	1.5	0.7	1.6	1.9	0.8	1.8
Sandy clay, Silty clay, Clay	1.7	0.75	1.6	2.0	0.9	1.8
Peat or Muck	NOT RECOMMENDED					
Eroded Slopes or Knobs Soils with pH greater than 8.0			NOT RECO	MMENDED	<u></u>	

(b) If using DUAL 8E on sorphum, CONCEP II safened seed should be planted.

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(c) For intervals longer than 28 days due to delayed planting, etc., another herbicide treatment is needed before, at, or after planting.

(d) For sandy loam soils containing less than 1.5% O.M., increase the treatment interval from 14 to 21 days. Use the 14 day interval for sandy soils containing more than 1.5%.

\*For rates between those listed at 14 and 28 days, adjust the rate proportionately.

Cocklebur, Common purslane Lambsquarters Smartweed (Pennsylvania) Velvetleaf\*

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\*Under conditions such as low temperatures, lack of soil surface moisture or other factors causing a delay in germination of the seeds, the degree of control may be impaired against these weeds.

Apply Cynex DF plus propachlor at the proper rate for soil texture and organic matter shown in Table 19.

Any rotational crop may be planted the fall or spring following this treatment.

#### TABLE 19 PREEMERGENCE BROADCAST APPLICATION RATES IN POUNDS OF Cynex DF PLUS QUARTS OF PROPACHLOR (RAMROD) 4L PER ACRE ON GRAIN SORGHUM

COLL TEVTIDE	PERCENT ORGANIC MATTER IN THE SOIL*						
SOIL TEXTURE DESCRIPTION	2%			1	3%		
	Lbs. Cynex	Ŧ	Qts. RAMROD	lbs. Cynex	Qts. + RAMROD		
Sand, Loamy sand			DO NOT U	JSE			
Sandy loam	1.1(a)		2.5	1.3	3.0		
Loam, Silt loam, Silt	1.3		3.0	1.5	3.5		
Sandy clay loam, silty clay loam	1.5		3.5	1.8	4.0		
Sandy clay, Silty clay, Clay	1.8		4.0	1.8	4.0		
Peat or Muck	NOT RECOMMENDED						
Eroded Slopes or Knobs Soils with pH greater than 8.0	NOT RECOMMENDED						
(a)The first number is pounds/acr is quarts/acre of Ramrod 4L.	e of Cyne	x DF.	The second num	ıber			

#### Cynex DF IN THREE-WAY COMBINATIONS

Cynex DF plus atrazine plus DUAL, LASSO or RAMROD may be applied preemergence or with shallow incorporation for weed control in grain sorghum only in the states of Kansas, Nebraska and South Dakota. These treatments provide control of weeds listed on this label in the Weeds Controlled section-for Cynex DF on grain sorghum. Additional weeds controlled by these combinations include:

Grasses:	Barnyardgrass (1)	Witchgrass (2)
	Stinkgrass (2)	Giant Foxtail
	Fall Panicum	

(1), (2) Refer to Weeds Controlled section on grain sorghum for explanation.

Rotational Crops If the crop treated with this combination is lost, corn or grain sorghum may be replanted immediately without retreatment. Refer to the "General Information" section of the Cynex DF label and to the tank mix product labels for additional information regarding crop rotation.

#### Cynex DF plus ATRAZINE plus DUAL

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DUAL can be used on grain sorghum only with seed treated with CONCEP II seed safener.

Use Cynex DF plus DUAL 8E at the proper rate for soil texture and organic matter indicated in Table 20. Use only on soils having at least 1% organic matter.

#### TABLE 20 PREEMERGENCE OR SHALLOW PREPLANT INCORPORATION BROADCAST APPLICATION RATES IN POUNDS OF Cynex DF, QUARTS OF ATRAZINE 4L PLUS PINTS OF DUAL 8E PER ACRE OF GRAIN SORGHUM (a. b)

Soil Texture Description	Pro	duct	Percent 1%	Organic Mat 2%	ter In Soil* 3%	
Sand, Loamy sand, Sandy loam		, <u>, , , , , , , , , , , , , , , , , , </u>		DO NOT USE		
Loam Silty Ioam Silt	Cynex DF Atrazine 4L Dual 8E	Pounds Quarts Pints	0.75 0.3 1.5	0.8 0.4 1.5	0.9 0.4 1.5	
Sandy clay loam Clay loam Silty clay loam	Cynex DF Atrazine 4L Dual 8E	Pounds Quarts Pints	0.8 0.4 1.5	0.9 0.4 1.75	1.0 0.5 1.75	
Sandy clay Silty clay Clay	Cynex DF Atrazine 4L Dual 8E	Pounds Quarts Pints	0.9 0.4 1.5	1.0 0.5 1.75	1.0 0.5 2.0	
Peat or Muck		NOT RECOMMENDED				
Eroded Slopes or Knobs soils with pH greater than 8.0		NOT RECOMMENDED				
(a) When using DUAL (b) To enhance weed or	8E on sorghum, only	CONCEP II sa	fened seed sho	ould be planted.		

precipitation or where long dry periods are common, this treatment may require shallow incorporation with a tool such as a field cultivator operated at 5-7 mph.

\* For organic matter content between those listed, ar ust the rate proportionately

#### Cynex DF plus ATRAZINE plus LASSO

LASSO can be used on grain sorghum only with seed treated with Screen seed safener.

Use Cynex DF plus ATRAZINE 4L plus LASSO 4EC at the proper rate for soil texture and organic matter indicated in Table 21. Use only on soils having at least 1% organic matter.

#### TABLE 21 PREEMERGENCE OR SHALLOW PREPLANT INCORPORATION BROADCAST APPLICATION RATES IN POUNDS OF Cynex DF, QUARTS OF ATRAZINE 4L PLUS QUARTS LASSO EC PER ACRE OF GRAIN SORGHUM (a, b)

Soil Texture Description	Proc	luct	Percent 1%	Organic Mat 2%	ter In Soil* 3%
Sand, Loamy sand			]	DO NOT USE-	
Sandy loam	Cynex DF	Pounds	None	0.75	0.8
	Atrazine 4L	Quarts	None	0.3	0.4
	Lasso EC	Quarts	None	2.0	2.0
Loam	Cynex DF	Younds	0.75	0.8	0.9
Silty loam	Atrazine 4L	Quarts	0.3	0.4	0.4
Silt	Lasso EC	Quarts	2.0	2.0	2.0
Sandy clay loam	Cynex DF	Pounds	0.8	0.9	1.0
Clay loam	Atrazine 4L	Quarts	0.4	0.4	0.5
Silty clay loam	Lasso EC	Quarts	2.25	2.25	2.25
Sandy clay	Cynex DF	Pounds	0.9	1.0	1.0
Silty clay	Atrazine 4L	Quarts	0.4	0.5	0.5
Clay	Lasso EC	Quarts	2.25	2.25	2.5
Peat or Muck		NO	T RECOMME	ENDED	
Eroded Slopes or Knobs soils with pH greater than 8.0	NOT RECOMMENDED				

(a)When using LASSO 4EC on sorghum, only SCREEN safened seed should be planted.

(b)To enhance weed control in areas of less than 25 inches of annual precipitation or where long dry periods arecommon, this treatment may require shallow incorporation with a tool such as a field cultivator operated at 5-7 mph.

\*For or --- matter content between those listed, adjust the rate proportionately.

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# TABLE 22PREEMERGENCE BROADCAST APPLICATION RATES IN POUNDS OF CynexDF, QUARTS OF ATRAZINE 4L AND QUARTS OF PROPACHLOR (RAMROD) 4LPER ACRE ON GRAIN SORGHUM

PERCENT ORGANIC MATTER IN SOIL*							
	2%			3%			
Pounds Quarts Quarts Cynex Atrazine Ramro		Quarts Ramrod	Pounds Cynex	ounds Quarts ynex Atrazine I			
	DO NOT USE						
0.7(a)	0.3	2.25	0.8	0.4	2.7		
0.8	0.4	2.7	0.9	0.4	3.15		
0.9	0.4	3.15	1.0	0.5	3.6		
1.0	0.5	3.6	1.0	0.5	3.6		
1	<b>.</b>	NOT RECO	MMENDEI	; D			
		NOT RECO	MMENDEI	D			
• • •	Pounds Cynex 0.7(a) 0.8 0.9 1.0	Percent           2%           Pounds Cynex         Quarts Atrazine           0.7(a)         0.3           0.8         0.4           0.9         0.4           1.0         0.5	Percent Organic           2%           Pounds Cynex         Quarts Atrazine         Quarts Ramrod          DO NOT U           0.7(a)         0.3         2.25           0.8         0.4         2.7           0.9         0.4         3.15           1.0         0.5         3.6           NOT RECO	PERCENT ORGANIC MATTE           2%         Pounds Cynex         Quarts Atrazine         Quarts Ramrod         Pounds Cynex          D0 NOT USE	PERCENT ORGANIC MATTER IN SOIL:           2%         3%           Pounds Cynex         Quarts Atrazine         Quarts Ramrod         Pounds Cynex         Quarts Atrazine		

\*For organic matter content between those listed, adjust the rate proportionately.

#### Cynex DF plus ATRAZINE plus RAMROD

Use Cynex DF plus Atrazine 4L plus Ramrod at the proper rate for soil texture and organic matter indicated in Table 22. **DO NOT USE IN CALIFORNIA.** 

TABLE 23         PREPLANT BROADCAST APPLICATION RATES PER ACRE FOR Cynex DF         FOR WINTER WHEAT (60 DAYS BEFORE PLANTING*)								
	POUNDS OF Cynex DF Percent Organic Matter in Soil							
Soil Texture Description	Less than 2%	More than 2%						
Sand, Loamy sand	2.2	2.7						
All other textures	2.7	3.1						
*For applications made 45 days n	rior to planting decrease the C	vnex rate indicated by 0.4 nound/acre						

#### WHEAT ) EARLY PREPLANT

Cynex DF may be used for Early Preplant or Post-harvest weed control in continuous winter wheat.

Weeds controlled: See FALLOW CROPLAND section of this label.

Apply after wheat harvest but 45-60 days prior to planting winter wheat. Use at the proper rate for soil texture and organic matter indicated on Table 23. Add nonionic surfactant at 1-2 qts./100 gals. of diluted Spray. Use the higher rate of surfactant when dry weather conditions prevail. Failure to wait the recommended time interval between application and planting may result in crop injury and stand reduction. Use of this treatment on calcareous or caliche subsoil outcroppings may result in crop injury and stand reduction.

) For best results, during harvest use a straw chopper/spreader on the combine that distributes the straw uniformly over the soil surface unless the straw is to be baled and removed prior to treatment. Avoid tillage after application as it may reduce the effectiveness of the herbicide treatment.

Where broadleaf weeds are present at time of application, tank-mix 1 1/3 - 2 pts./A. of 2,4-D low volatile 6 lb./gal. ester (2-3 pts./A. of 2,4-D LV 4 lb./gal.) (or 2,4-D Amine at recommended rates). Use the high ratio when weeds are over 4 inches tall or when directed on the 2,4-D label for control of hard-to-kill weed species, such as perennials.

Where grasses and broadleaf weeds are present and exceed 2 inches in height, tank-mix with 1-2 pts./A. (2 lbs./gal.) or 1.3-2.7 pts./A. (1.5 lbs./gal.) of paraquat. Well established weeds over 6 inches tall may not be well controlled. Apply at least 25 gals./A. of spray mixture by ground sprayer where paraquat is included in the tank mixture.

No more than two applications of Cynex DF may be made prior to planting wheat including applications made under the FALLOW CROPLAND section of this label.

#### FALLOW CROPLAND

Weeds Controlled by Cynex DF Alone and in Tank-mix Combinations

#### Grasses

Annual ryegrass (Italian)	Indian lovegrass			
Barnyardgrass*	(Stinkgrass)			
Crabgrass	Volunteer wheat			
Cheatgrass	Wild oat*			
Downy brome	Witchgrass			
Green foxtail	Yellow foxtail			

#### **Broadleaves**

Cocklebur*	Prostrate spurge
Common chickweed	Purslane
Dog fennel	Russian thistle
False flax	Shepherdspurse
Henbit	Smartweed
Horseweed (marestail)	(Pennsylvania)
Kochia	Sunflower* (wild)
Lambsquarters	Purple mustard
Pennycress	Tansy mustard
Pigweed*	Tumble mustard
Prickly lettuce	Wild radish
Prostrate knotweed	Wild buckwheat*

\*Under soil moisture and temperature conditions favoring deep germination or other factors that may cause delayed germination, these species may not be completely controlled.

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Additional weeds controlled are listed in the CORN section of this label, Cynex DF may be used alone or in tank-mix combination with atrazine for the control of certain annual weeds during a fallow program.

Cynex DF or Cynex DF plus atrazine should be used in tank-mix combination with paraquat and/or 2,4-D as described below if growing vegetation is present. Should weeds become established before adequate rainfall for- herbicide activation occurs, sweep tillage may be employed to destroy them.

#### **Application Directions**

Apply fallow cropland herbicide treatments uniformly to the soil surface. Adjust boom height on ground rigs to obtain the correct spray pattern a: the top of the stubble rather than the ground. At sprayer speeds over 8 mph and when crop residues are heavy, use flood type nozzles aid at least 20 gal./A. of carrier.

#### **Cynex DF Applied Alone**

Select the appropriate rate of Cynex DF from Table 25. Add nonionic surfactant at the rate of 1 qt./100 gals. of diluted spray or other suitable surfactant at recommended rates. Winter wheat may be planted four months or more after treatment. Spring wheat or durum wheat and other rotational crops may be planted nine months after treatment. Grain sorghum or field corn may be planted in the spring following a late fall application.

#### Cynex DF Plus Atrazine

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Cynex DF may be used in tank-mix combination with atrazine where a maximum period of weed control is desired in a fallow cropland program. Treatments must be applied before November 15 of the year before planting winter wheat or at least 11 months before planting spring wheat or durum wheat. Select the appropriate rates of Cynex DF plus atrazine or a particular location from Table 25. Add nonionic surfactant at 1qt./100 gals. of diluted spray or other appropriate surfactant at recommended rates.

	POUNDS PER ACRE OF Cynex DF**				
Soil Texture Description	Post Harvest Treatment for Fall Weed Control	Late Fall Treatment For Spring Weed Control	Spring Treatment for Spring Weed Control		
Sand, Loamy sand, Sandy Ioan, Loam, Silt Ioam, Silt, Sandy clay Ioam, Clay Ioam	2.7	3.6	2.7		
Silty clay loam, Sandy clay, Silty clay, Clay	3.1	3.6	2.7		

except on highly erodible land with less than 30% plant residue cover, the rate limit is 3.0 lbs. cyanazine (3.3 lb Cynex DF).

LUCATION I KEATMENT	LOCATION/TREATMENT			LBS/ACRE QTS/ACR Cynex DF*** + ATRAZINE 4L4		
FALL APPLICATION FOR WIN <sup>7</sup> Kansas, southern Nebraska, Oklaho Slope between Hwy. 1-76 & State	1.8	+	0.8			
FALL APPLICATION FOR WINTER OR SPRING WHEAT Nebraska Panhandle, Wyoming, Utah, Colorado West Slope & East Slope north of Hwy. 1-76 & south of Hwy. 96, Idaho, Montana, North Dakota, South Dakota			1.8	+	0.6	
SPRING APPLICATION FOR SPRING WHEAT Idaho, Montana, North Dakota, South Dakota, northern Utah, northern Wyoming		f orthern	2.2	+	0.4	
FALL APPLICATION FOR WINTER WHEAT		Over 15"	2.2	+	0.4	
Columbia Basin areas of Washington & Oregon	Average Annual Rainfall	10-15*	2.2	+	0.27	
		Under 10"	2.2	+	0.2	

(3.3 lb Cynex DF).

Do not use this treatment on sands or on Rosebud or Canyon series soils, or on calcareous or caliche subsoil outcroppings because of possible atrazine carryover damage to the succeeding crop.

Do not graze or feed foliage from treated areas to livestock within six months after application.

NOTE: If conditions cause weeds to begin to germinate in the spring or summer following a post-harvest treatment of Cynex DF or Cynex DF plus atrazine, an application of Cynex DF may be made for additional weed control in the spring or summer prior to planting winter wheat. Apply as directed under "Cynex DF Applied Alone" in this section of the label. Do not make more than two applications of Cynex DF or any compound containing cyanazine

#### prior to planting.

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#### **Cynex DF Combinations** with Paraquat

On fallow crop land having an existing or established weed population, paraquat may be tank mixed at 1-2 pts./A. (2 lbs./gal.) or 1.3-2.7 pts./A. (1.5 lbs./gal.) with either Cynex DF or Cynex DF/atrazine tank-mix combination as previously described in this section. Apply the recommended rates in at least 25 gallons of spray mixture per acre by ground rig. Use higher volumes and the high rates of paraquat when weed growth is heavy or when dry weather conditions prevail. Add nonionic surfactant at 1 qt./100 gals. of diluted spray or other suitable surfactant at recommended rates. Established weeds over 6 inches tall may not be completely controlled.

#### Cynex DF Combinations with 2,4-D

2,4-D LV Ester may be added to any treatment in this section to help control broadleaf weeds growing at the time of application. Use 1-1/3 to 2 pts./A. of 2,4-D LV 6 lb. Ester (2-3 pts./A. of 2,4-D LV 4 lb. Ester) (or 2,4-D Amine at recommended rates). Use the high rate when weeds are over 4 inches tall or when directed on the 2,4-D label for the control of hard-to-kill weed species, such as perennials. When 2,4-D is used, it should be added to the spray tank last.

#### **Use of Supplemental Tillage**

In fields where established weeds are too large to be effectively controlled with paraquat or 2,4-D, sweep tillage should be employed. Till before applying the herbicide treatment. This type of tillage will preserve a maximum amount of existing stubble on the surface for soil protection. Similar tillage may also be used if weeds become established prior to receiving adequate rainfall for activation of the herbicide treatment. At some point prior to seeding wheat, the herbicide will degrade and no longer be effective. Limited tillage should be employed at this time. This tillage should be kept shallow to preserve as much moisture as possible for the crops.

#### WARRANTY STATEMENT

Griffin Corporation warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purposes stated on such label only when used in accordance with the directions under normal use conditions. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Griffin. In no case shall Griffin be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS

### FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESSED OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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BLADEX, EXTRAZINE. - Trademarks of E.I. DuPont de Nemours & Co. (Inc.)
BANVEL - Trademark of Sandoz Crop Protection Corp.
DUAL, CONCEP II, Trademarks of CIBA-Geigy Corp.
ERADICANE, SUTAN+ Trademarks of ICI Americas, Inc.
LASSO, RAMROD, SCREEN - Trademarks of Monsanto Co.
PRINCEP, CALIBER - Trademarks of CIBA-Geigy Corp.
PROWL - Trademark of American Cyanamid.
TREFLAN - Trademark of Elanco Products Company.
ZORIAL RAPID 80 - Trademark of Zoecon Corporation.

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	Washington, D.C. 20460		1812-365	
	NOTICE OF DESTICIDE.		Term of Issuance:	CONDITIONAL
AL PROTES	XX_ Registration		• • •	
· · · · · · · · · · · · · · · · · · ·	Reregistration		Name of Pesticide	Product: Cynex DF
(under FIFRA, a	amended)			CJACK DI
Name and Addres	es of Registrant (include ZIP Code);			
		•		
Griffin (	orporation			
P.O. Box Valdosta	1847 GA 31603-1847	•		
Note: Changes and accepted by refer to the al	A labeling differing in substance from that accepted the Registration Division prior to use of the label ove SPA registration number.	d in connection 1 in commerce.	with this registra In any corresponde	tion must be rubmitted to nce on this product always
On the basis of	information furnished by the registrant, the above	named pesticide	a is hereby regists	red/reregistered under the
Registration in	s in no way to be construed as an endorsement or reco	ommendation of 1	this product by the	Agency. In order to
ptect health )ticide in ac c is not to b others.	and the environment, the Administrator, on his motic cordance with the Act. The acceptance of any name is se construed as giving the registrant a right to excl	on, may at any t in connection w lusive use of th	time suspend or can ith the registration he name or to its u	cel the registration of a n of a product under this se if it has been covered by
This 3(c)(7)(#	product is conditionally regis ) provided that you:	tered in	accordance	with FIFRA sec.
I. Subm your regi acce FIFF	nit and/or cite all data require r product under FIFRA sec. 3(c)( strants of similar products to eptable responses required for r PA section 4.	d for reg 5) wnen t submit su eregistra	istration/ he Agency r ch data; an tion of you	reregistration of equires all d submit r product under
II. Make	e the following label changes:			:
A. <u>On r</u>	page 1:			
) 1)	Revise the EPA Registration Nu 365".	mber to r	ead, "EPA R	eg. No. 1812-
2)	Enclose the Restricted Use Pes Notice 93-1 and 40 CFR 156.10(	sticide st	atements in	a box per PR
3)	You must include the Net Conte 40 CFR §156.10.	ents as pr	escribed in	paragraph (d) of
B. <u>On r</u> sent	<u>page 2</u> : Under the <b>PRECAUTIONARY</b> cence to read "Causes moderate e	<b>STATEMEN</b> eye injury	TS section,	change the 3rd
C. On r	page 3:			
1)	Under the ENVIRONMENTAL HAZARD "can" in the first sentence. the product name from "Cynex" and review label to ensure pro	<b>)S</b> section In the se to "Cynex oduct name	, change th cond paragr DF" in the is "Cynex	e word "ban" to aph, add change first sentence DF" not "Cynex".
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- C. <u>On page 3</u>: continued
  - 2) Under the **DIRECTIONS FOR USE** section, add the sentence "This labeling must be in the possession of the user at the time of pesticide application." after the first sentence.

- D. <u>On page 4</u>:
  - 1) In the AGRICULTURAL USE REQUIREMENTS box, delete the right parentheses ")" and delete the blank spaces in the second sentence. Add the following bullet to the list of required PPE for early entry to treated areas: "-Protective eyewear."
  - 2) In the STORAGE AND DISPOSAL box, under "STORAGE", add the sentence "Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material."
  - 3) Under the BEST MANAGEMENT PRACTICES FOR GROUND AND SURFACE WATER PROTECTION section, capitalize the "T" in "This" in the second sentence. On page 5: in the first full paragraph, correct the spelling of "that" on line 4; change the "100%" to "110%" in line 9; and delete the space between "above-specified" on line 14.
- E. Delete all references to grain sorghum (milo) (except in the rotational crop section); wheat and wheat/sorghum/fallow rotation; peanuts; soybeans and small grains (except in the Conservation Tillage Treemergence Uses On Corn section) from the label because they are considered new Me-Too uses since they are not registered for the product cited as being substantially similar to your product. Delete from the label the sentence "Any rotational crop may be planted in the fall or spring following these treatments." or state the specific rotational crops to be used, i.e. corn, sorghum, etc..
- F. On page 6: Under Weather Effects: section, correct the product name to Cynex DF in the last sentence of the first paragraph. In addition, the last sentence in the fourth paragraph should go in the ROTATIONAL CROPS section of the label.
- G. <u>On page 7</u>: Change 7.5 gallons to 10 gallons of water in Section I. 1. or justify the lower gallonage. Also, add the phrase "on corn." to the end of the first sentence in Section I. 2.

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- H. <u>On page 8</u>: Under I. 8. and 13., change "emulsible oil" to "emulsible crop oil" and "oil concentrate" to "crop oil concentrate".
- I. <u>On page 10</u>: In the chart, change "Cynex DF/SUTAN+6.7E" to "Cynex DF/SUTAN+ or Eradicane 6.7E".
- J. Clarify all tank mix product names, i.e. "Eradicane 6.7E, "Princep 4L", "DUAL 8E", "Gramoxone Extra", etc. Check all tank mix product rates and use directions throughout the label to make sure they are correct and they are compatible with Cynex 4DF. According to PR Notice 82-2, the tank mix directions must include statements similar to the following:

- K. <u>On page 11</u>: Under **General Blending Directions**, Sections B. and C. should be moved to the tank mix section since they do not apply to fertilizer impregnation.
- L. <u>On page 12</u>: Correct the spelling of "Spray" and "more" in 2. Delete extra lines in Section D. Delete the statement "(For more information..., see Du Pont Bulletin...)" unless you intend to provide the technical bulletin with your product.
- M. <u>On page 14</u>: Clarify "CORN" heading by adding "(Field corn, popcorn, sweet corn and corn grown for seed)" or add a sentence under the heading to reflect this information. Under Cynex DF Applied Alone section, clarify the last sentence to include corn and sorghum as the only rotational crops.
- N. On page 15: Under Cynex COMBINATIONS section, add the statement "Follow the label with the most restrictive requirements." In the Cynex plus Atrazine section, correct the spellings of "may" and "the". Specify by product name all applicable atrazine tank mix products.
- O. In the Rotational Crops section, consolidate all paragraphs relating to Rotational Crops under one section. Clarify which "tank mixtures" are associated with the rotational crops. Delete all references to peanuts. Correct the spelling of "the" and "planted". Add the sentence "When Cynex DF is tank

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> mixed with other herbicides, refer to the manufacturer's label and use the most restrictive crop rotation interval." In **Table 2** under 3%, correct the rate to 1.6 + 0.6 for sand, Loamy sand or justify the higher rate. In the **Cynex DF plus SUTAN+ or ERADICANE 6.7E** section, modify the last sentence to read "Do not use on field corn grown for seed."

- P. <u>On page 20</u>: Under CONSERVATION TILLAGE WEED CONTROL, define early preplant (EPP) as "(30 days prior to planting until emergence"). In TABLE 5, under 3%, change the rate to "1.2 + 0.5" in the Sand, Loamy sand section.
- Q. <u>On page 22</u>: Modify the heading to "**POSTEMERGENCE USES ON** CORN".
- R. <u>On page 29</u>: Justify the reason for the **Cynex DF plus DUAL 8E** section, including the use (sweet corn?), since this table does not appear on the substantially similar cited product.
- S. <u>On page 34 and 35</u>: **TABLE 13** should have the "Height of Cotton as 6 inches or more". The rates in **TABLES 14 and 15** should be in lbs. or pints per acre, i.e. lbs. a.i./acre.
- T. <u>On pages 36 53</u>: Delete all sections referring to Grain Sorghum, Wheat/Sorghum/Fallow Rotation and Fallow Cropland. See comments for E. above.
- III. You must include in all of your cyanazine registrations that you agree to the terms and conditions set forth in sections 3., 4., 5., 6., 7., and 8. of the DuPont/Agency cyanazine phase-out agreement which was approved on August 2, 1995. Some of those terms include the following:
  - A. The labels of all cyanazine formulated end-use products released for shipment after July 25, 1996, for use in the U.S., must be amended as follows:
    - (1) Limit the maximum use rates from the current 6.5 lbs./acre to 5 lbs./acre beginning January 1, 1997; 3 lbs./acre beginning January 1, 1998; and 1 lb./acre beginning January 1, 1999 through December 31, 2002.
    - (2) Specify that closed cab application will be required for applications to be made during or after the 1998 use season.
    - (3) Add the following statements: "This product may not be sold or distributed after September 30, 2002." and "This product may not be used after December 31, 2002."

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> B. No cyanazine formulated end use products registered for use in the U.S. shall be released for shipment by a registrant after December 31, 1999.

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- C. Existing stocks of all cyanazine formulated end use products that have been released for shipment by a registrant on or before December 31, 1999, may continue to be distributed and sold in the channels of trade in accordance with their labels through September 30, 2002. The use of such existing stocks may continue in accordance with their labels through December 31, 2002.
- D. The voluntary cancellation date of December 31, 1999 shall become a part of the terms and conditions of all cyanazine registrations.
- IV. Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

#### **RESTRICTED USE PESTICIDE**

This product is a restricted use herbicide due to reproductive and ground and surface water concerns. Users must read and follow all precautionary statements and instructions for use in order to minimize potential for Cyanazine to reach ground and surface water. For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

#### Cynex DF DRY FLOWABLE HERBICIDE

#### **ACTIVE INGREDIENTS:**

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Cyanazine, 2[[4-chloro-6-(ethylamino)-s-triazin-2-yl]amino]-methylpropionitrile	90%
INERT INGREDIENTS	10%
TOTAL1	.00%

#### **KEEP OUT OF REACH OF CHILDREN** WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

#### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Call a physician or poison control center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**IF IN EYES:** Flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN: Wash immediately with plenty of soap and water.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth and get medical attention.

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ACCEPTED with COMMENTS In EPA Letter Dated

FEB - 8 1995

Valdosta, GA 31601

GRIFFIN CORPORATION Under the Federal Insecticide Fundicide, and Rodenticide Act as amended, for the pesticide • EPA Reg. No.

EPA REG. NO. 1812- GAL

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS (AND DOMESTIC ANIMALS) WARNING

May be fatal if swallowed. Harmful if inhaled or absorbed through tie skin. Causes temporary eye injury. This product may be hazardous to your health. It is classified "Restricted Use" because, at doses which caused serious maternal illness in laboratory animals, birth defects were present. Use of protective clothing and equipment and following the precautions below can reduce risk.

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

Keep out of reach of domestic animals, particularly cattle. Consumption of this product, spray solutions, or water contaminated with product can result in serious illness or possible death of bovines.

#### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants

- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or polyvinyl chloride or viton or neoprene rubber.

- Chemical-resistant footwear plus socks

- Protective eyewear

- Chemical-resistant apron when cleaning equipment, mixing or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. ŧ

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#### ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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#### USER SAFETY RECOMMENDATIONS

Users should:

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- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. - Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### ENVIRONMENTAL HAZARDS

Cyanazine is a chemical which can move (seep or travel) through soil and ban contaminate groundwater which may be used as drinking water. Cyanazine has been found in groundwater as a result of agricultural use. Users are advised not to apply Cynex DF where the water table (groundwater) is close to the surface and where the soils are very permeable (i.e., well drained soils such as loamy sands). Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Cyanazine, the active ingredient in Cynex has been detected in surface waters that receive run-off from treated areas. To minimize cyanazine run-off, follow the Best Management Practices outlined in the Directions For Use section of this label.

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Keep out of lakes, streams or ponds. Do not contaminate water by cleaning equipment or disposal of wastes.

#### **DIRECTIONS FOR USE**

) It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for perticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides.

AGRICULTURAL USE REQUIREMENTS (continued on next page)

#### AGRICULTURAL USE REQUIREMENTS (continued)

It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label )

about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

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- Coveralls.
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or polyvinyl chloride or viton or neoprene rubber.
- Shoes plus socks.

#### STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food or feed by storage or disposal. Do not use or store around the home environment. Avoid contact with water. In case of spill or leak, avoid breathing dust or vapors, clean up and dispose of wastes in compliance with local, State and Federal regulations.

**PESTICIDE DISPOSAL:** Pesticide, spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to applicable Federal, State or local procedures.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### BEST MANAGEMENT PRACTICES FOR GROUND AND SURFACE WATER PROTECTION

This product may not be mixed or loaded within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes, and reservoirs. this product may not be mixed,

loaded or used within 50 feet of all wells, including abandoned wells, drainage wells, and sinkholes.

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Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load :hat may be positioned on or moved across the pad. Such a pad shall be resigned and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash-water, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain, at a minimum, 100% of the capacity of the largest pesticide containment capacity of 100% of the capacity of the largest pesticide container or application equipment capacity of the capacity of the largest pesticide above shall be maintained at all times. The above- specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

States may have in effect additional requirements regarding well-head setbacks and operational area containment.

This product may not be applied aerially or by ground within 66 feet of the points were field surface water run-off enters perennial or intermittent streams and rivers or within 200 feet of natural or impounded likes and reservoirs. This product may only be applied to highly erodible land if the 66 foot buffer or set-back from run-off points is planted to crop or seeded with grass.

Cyanazine Rate Limits: One pound of Cynex DF contains 0.9 lb cyanazine active ingredient (a.i.). Adhere to the use rate recommendations in this or other label. In addition:

- a. Do not apply more than 6.5 lbs. total cyanazine a.i. (all sources) per acre per year to any land.
- b. On highly erodible land, as defined by the Soil Conservation Service, if plant residue cover is less than 30%, do not apply more than 30% pounds total cyanazine a.i. (all sources) per acre per year.

Where there are state/local requirements regarding cyanazine use (including lower maximum rates and/or higher setbacks) which are different from the label, the more restrictive/protective requirements apply.

#### **GENERAL INFORMATION**

Cynex DF Herbicide is a selective herbicide for the control of annual grasses and broadleaved weeds in field corn, popcorn, sweet corn, cotton, grain sorghum, wheat and fallow cropland.

Consult your local Agricultural Extension Agent for help in determining soil texture, organic matter content, and the most appropriate herbicide rate for local conditions.

Where surfactants or emulsible vegetable oils are added to Cynex DF for over the top of corn postemergence applications, use on field corn only.

Do not apply this product in irrigation water with any kind of irrigation system.

Do not apply this product with aerial application equipment.

Cynex DF is not effective when used preemergence on peat or muck soils. Do not use Cynex DF on sands or loamy sands (soils consisting of more than 70% sand) containing less than 1% organic matter.

Weather Effects: As a preemergence herbicide, Cynex DF is active mainly through the roots, and therefore, its effect on weeds is dependent on adequate rainfall or sprinkler irrigation to move the herbicide into the root zone. Moisture should be sufficient to thoroughly wet the soil throughout the zone where weed seeds may germinate and enough to make the soil too wet to cultivate. Rotary hoeing or shallow cultivation is recommended tor those applications which are not incorporated at the time of treatment, if adequate rainfall or sprinkler irrigation has not occurred within about ten days after application of Cynex 90)F.

Heavy rainfall between planting and crop emergence may cause crop injury or stand loss. Rainfall tends to cause excessive concentrations of herbicide in the seed furrow, resulting in possible crop injury. Level deep planter marks or seed furrows before application.

Under conditions which delay weed germination, such as low temperatures, lack of soil surface moisture, or when germination extends over a long period, the effectiveness of the herbicide may be impaired. Rotary hoeing, shallow cultivation or a postemergence herbicide treatment may be of benefit under these circumstances.

If the crop is cultivated, tillage should be shallow to minimize herbicide dilution in the soil. Should the crop stand be lost due to adverse weather conditions, insects, etc., the field can be replanted the same season to corn or sorghum.

To enhance weed control in areas of less than 25 inches of rainfall or where long dry periods are common, these treatments may require shallow incorporation with a tool such as a field cultivator operated from 5-7 mph. Incorporation should not be more than three inches deep

to keep from burying the herbicide. A spike-toothed harrow, deep tillage disk or rolling basket device is not recommended for incorporating Cynex DF.

When applied as a post-emergence herbicide, Cynex DF is also active through foliage as well as through the roots. Yellowing and/or stunting of the crop may result from this treatment, particularly if cold, adverse growing conditions occur after application. Extended or extreme cold and wet conditions may reduce stands. Do not apply Cynex DF postemergence to a crop that is damaged or growing under stress.

## OBSERVE ALL CAUTIONS AND LIMITATIONS ON LABELING OF ALL PRODUCTS USED IN MIXTURES.

Triazine Resistant Weeds: In fields where triazine resistant biotypes of weeds have been identified, Cynex DF should be used in combination with or in sequence with other registered non-triazine herbicides. (Triazine resistant biotypes of Kochia and Pigweed have been identified in some fields in the Western Great Plains and triazine resistant biotypes of Pigweed and Lambsquarters have been identified in some fields in various states.) Consult with appropriate state agricultural extension service representatives for specific recommendations.

#### **APPLICATION DIRECTIONS**

#### GENERAL MIXING AND SPRAYING INSTRUCTIONS

This product may not be applied by means of chemigation or aerial application.

Use sufficient agitation to ensure that the Cynex DF is completely dispersed and in uniform suspension prior to application or tank mixing with other formulations.

The following general mixing instructions are recommended when using this or any other liquid suspension formulation.

#### I. General

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- 1 Unless otherwise specified, use at least 7.5 gallons of water per acre for soil applications and at least 15 gallons of water per acre for foliar applications for all applications with ground equipment. NOTE: Sufficient carrier must be used to assure uniform application. Follow label requirement of all products used in tank mix combinations.
- 2 A nitrogen solution or complete liquid fertilizer may replace all or part of the water as a carrier for preemergence or preplant application. Do not apply fertilizer mixtures after crop emerges, because injury may occur.
- 3 Always check the tank mix compatibility (TMC) of this or any other formulation before mixing with liquid fertilizer carries or other formulations. A simple but

generally reliable TMC evaluation procedure has been provided for your use in step II of these mixing instructions.

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- 4 Start with thoroughly clean equipment. (See the label of previous compound for cleaning instructions.)
- 5. Fill tank 1/2 full with carrier. Start and maintain consistent agitation through all mixing and spraying procedures. Make sure that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
- 6. Slowly add the dry flowable (DF) to the tank or inductor.
- 7. Fill tank to 75 percent capacity with carrier. Filling and bypass lines should be kept below liquid surface. Increase tank agitation if necessary to maintain surface action.
- 8. When desired, appropriate emulsible oil, oil concentrate, or other tank mix formulations should be added at this time. Pre-slurry these added ingredients before addition, if the compatibility test shows it to be necessary.
- 9. Complete filling tank maintaining sufficient agitation at all times to ensure surface action. This applies to both spray and nurse tanks.
- 10. Tank mixtures should always be applied immediately after preparation. If for any reason this is not possible, assure that sufficient agitation has been provided to re-mix all products and check for complete resuspension prior to application.
- 11. Empty tank as completely as possible before refilling to prevent buildup of oil or emulsible concentrate residues when tank mixing with these formulations. Always maintain agitation to avoid separation.
- 12. If an oil or emulsible concentrate film starts to build up after using these formulations, drain and clean the tank with strong detergent solution or appropriate solvent.
- 13. It is recommended that the sprayer be thoroughly cleaned by flushing with a detergent solution at the end of each work day when any emulsil ie oil, oil concentrate, or other emulsible formulation has been used either alone or in tank mix combinations with other pesticide formulations, even if no obvious problems have been encountered. This precaution will ensure a clean sprayer and continued trouble-free operation.

#### **II.** Tank Mix Compatibility Evaluation Procedure

- 1. Add one pint of carrier liquid to each of two one-quart jars. Mark one quart jar "with" and the other "without."
- 2. Add 1/4 teaspoon of a suitable tank mix compatibility agent (1/4 teaspoon/pint = 2 pints/100 gallons of carrier) to the jar marked "with," cap the jar, and shake gently for five tc ten seconds to mix.
- 3. Add the appropriate amount of herbicide to both jars, cap each jar, and shake gently for five to ten seconds to mix. If problems are encountered in mixing wettable powder or dry flowable formulations into a liquid fertilizer, then preslurry these formulations in water prior to their addition to the liquid fertilizer and proceed with the test. The following chart has been provided to assist you in selecting the appropriate Cynex DF use rate for this evaluation. If more than one herbicide is to be used in the tank mixture, each should be added separately as

follows: water solubles first, wettable powders or dry flowables second, liquid flowables third, and emulsible concentrate or oil formulations last, with each jar capped and gently shaken for five to ten seconds for each addition.

Jar Test for Cynex DF Compatibility								
Gallons of Liquid Carrier per Acre	4	7.5	15	20	25	30	40	
Teaspoons of Cynex DF-per Pint of Liquid Carrier	6.0	3.2	1.6	1.2	1.0	0.8	0.6	

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This chart is based on one pound of Cynex DF (0.9 pound active ingredient) per acre in the indicated carrier volumes. Intended field use rates are achieved by varying the amount of Cynex DF; i.e., for a field use rate of 2.5 pound: of Cynex DF in 15 gallons of carrier per acre, add 4.0 teaspoons of Cynex DF to the quart jars containing one pint of carrier. Calculation: For 2.5 pounds of Cynex DF/15 gallons of carrier per acre, multiply 2.5 X 1.6 to get 4.0 teaspoons of Cynex DF per pint of carrier.

- 4. Let each jar stand one-half hour and make observations. If any separation, agglomeration, or precipitation has occurred, shake the jar again for 10 to 15 seconds, and note whether any of the following occur: a. Separated phases do not re-mix uniformly. b. Screen/nozzle plugging lumps do not disperse. c. Precipitate does not re-suspend readily. d. Precipitate sticks tenaciously to the glass.
- 5. If none of the above problems occur in either jar, then the herbicides can, in most cases, be safely used without a compatibility agent.
- 6. If problems 4.a or 4.b occur in the jar marked "without" but do not occur in the jar marked "with," the compatibility agent should be used.
- 7. If problems 4.a or 4.b are seen in both jars, then the herbicides and carrier mixture are incompatible and should not be used in the same spray tank. Alternatively, a different tank mix compatibility agent can be evaluated.
- 8. If problems 4.c or 4.d occur in the jar marked "without" but do not occur in the jar marked "with," the compatibility agent should be used unless constant, thorough agitation can be maintained and immediate clean-out of spray system is performed.
- 9. If problems 4.c or 4.d are seen in the jar marked "with," the user proceeds with mixing and application at his own risk should agitation in the system be insufficient or curtailed.

10. Those mixtures defined as compatible in this test should then be mixed for use as indicated in steps 1-12 of the general mixing instructions listed above.

If a test such as outlined indicates that components of a proposed mix are compatible, the applicator still has the responsibility of combining materials in sequence to the spray tank in accordance with directions prescribed on the label of the herbicides or pesticides involved.

Tests have indicated that compatibility agents, noted below by the various tank mix combinations, may give improved compatibility in liquid fertilizers.

Tank Mix Combination	Compatibility Agents
Cynex DF/LASSO (Liquid Fertilizer Grade)	Probably not needed in 28-0-0, 10-34-0. COMPEX may help in others.
Cynex DF/SUTAN+6.7E	Probably not needed in 28-0-0. Incompatible in 10-34-0 UNITE, SPRAY-MATE, KEM-LINK, may help in others.
Cynex DF/DUAL 8E	Probably not needed in 28-0-0. UNITE, SPRAY-MATE, Ivory Liquid may help in others.

#### III. Application Equipment

1. Use application equipment fitted with nozzles that provide accurate and uniform coverage. Be certain that nozzles are uniformly spaced and the same size. Calibrate sprayer before use and recheck frequently during use whenever possible.

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- 2. Use a pump with capacity to:
  - a. Maintain 35-40 psi at nozzles.
  - b. Provide sufficient agitation in tank to keep mixture in suspension.
  - c. Provide a minimum of 20 percent bypass at all times.
- 3. Use centrifugal pumps which provide sufficient shear action for dispersing and mixing this product. The pump should provide a minimum of 10 gallons/minute/100-gallon tank size circulated through the jets of a correctly-positioned sparger tube.
- 4. Use screens to protect the pump and to prevent nozzles from clogging. screens placed on suction side of pump should be 10 to 16 mesh. Do not place a screen in the recirculation line. Use a 40- to 50-mesh screen between the pump and boom and, where required, 50 mesh screens at the nozzles. Check your equipment manufacturer's literature for specific recommendations.

#### FERTILIZER IMPREGNATION

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Cynex DF Herbicide may be applied when coated on or impregnated in dry granular fertilizer for early preplant, preemergence or preplant incorporated weed control in field corn. All recommendations, cautions and special precautions on this label must be followed along with state regulations relating to dry bulk fertilizer blending, impregnating and labeling. Also, follow the precautions on the label of any product mixed with this product.

#### **General Blending Directions**

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Cynex DF may be coated on or impregnated in dry bulk fertilizers using tower blenders, rotary drum blenders or blending augurs or conveyors. DO NOT impregnate Cynex DF or tank mixes containing Cynex DF on or in fertilizers containing Ammonium Nitrate, Potassium Nitrate, or Sodium Nitrate. Do not use on straight limestone since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated when using Cynex DF alone. Use a minimum of 200 lbs. and a maximum of 450 lbs. per acre of dry fertilizer. Use equipment that will give a uniform distribution of the herbicide throughout each batch of impregnated fertilizer. Non-uniform impregnation can cause crop injury or unsatisfactory performance.

- A. Cynex DF may be used as the only herbicide for impregnation.
- 1. Add Cynex DF to 1/2 the total fertilizer volume required.
- 2. Spray one gallon of water (to break down the Cynex DF) and one gallon of diesel fuel (to prevent evaporation and crusting) per ton of fertilizer and allow to mix thoroughly. NOTE: If the fertilizer is dusty, add the diesel fuel to the fertilizer before adding the herbicide.

3. Add remaining fertilizer and mix thoroughly. (3 minutes or more for rotary blenders.)

- 4. Use 2-3% Ag-Sorb or 1-2% MP-79 drying agent (or a suitable amount of another effective drying agent) to insure a spreadable herbicide/fertilizer mixture. The need for a drying agent is determined by the wetness of the fertilizer batch. Wetness can change with humidity, nitrogen content, fertilizer types, fertilizer rates and herbicide rates.
- B. Cynex DF may be used in tank mixes with other dry herbicides including PRINCEP<sup>®</sup> and CALIBER<sup>®</sup> 90. Follow the procedure as above in "A".
- C. Cynex DF may be used in tank mixes where an EC or other liquid herbicide acts as the sticking agent. This may eliminate the need for water and/or diesel fuel.
- 1. While fertilizer is blending, add the Cynex DF. Experience has shown this will provide the most consistent performance due to the grinding action of the fertilizer on

the Cynex DF.

- 2. Spay in the EC herbicide and mix thoroughly. (3 minutes or mo-e for rotary drum blenders.)
- 3. Add drying agent to insure a spreadable herbicide/fertilizer mixture. Usually less drying agent is required when using Cynex DF.
- D. Pre-slurried Cynex DF can be used alone or in a tank mix for impregnation. For

rotary-drum mixers, the liquids can be moved into the drum using an air system or a liquid pump. Do not add extra water. Add drying agent to ensure a spreadable herbicide/fertilizer mixture.

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(For more information on Drying Agents, Application Equipment, Calibration Guide and variations of these methods, see DuPont Bulletin on "Fertilizer Impregnation").

#### CLEAN OUT:

Equipment used to impregnate or apply fertilizer impregnated with Cynex DF or combinations including Cynex DF must be cleaned out by running at least 1,000 lbs. of fertilizer not impregnated with Cynex DF through the impregnation equipment and application equipment, if the next batch of material is to be applied to a crop for which Cynex DF or a combination herbicide is not registered.

#### **APPLICATION:**

Uniform application of Cynex DF which has been impregnated in or coated on dry fertilizer is essential for satisfactory weed control and crop safety. Accurate calibration of the fertilizer applicator is necessary. Applying while turning at the ends of the fields may result in excessive application rates causing crop injury. Do not double apply across the ends or sides of the field.

Crop injury and/or poor weed control may occur where the impregnated fertilizer is not uniformly applied. Air flow or auger metered application equipment is preferred (one pass application). If other equipment is used, the recommended method of application is to apply 1/2 the recommended rate and overlap 50 percent to double apply by splitting the middles to obtain the best distribution pattern.

Apply immediately after impregnation. Impregnated fertilizer may become lumpy and difficult to spread if stored.

#### **RATES AND TIMING:**

Use the application rates and timing shown in the appropriate sections of this label. Follow the precautions on the labels of all products used.

#### CORN

#### WEEDS CONTROLLED BY Cynex DF ALONE AND IN COMBINATION WITH OTHER HERBICIDES ON CORN

#### Grasses

Annual bluegrass Annual fescues Annual (Italian) ryegrass Annual sedge Barnyardgrass(l)

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Bullgrass Crabgrass Fall panicum Giant foxtail Goosegrass Green foxtail

#### **Broadleaves**

Annual groundcherry Annual morningglory Black mustard Buffalobur Buttercup (annual) Carpetweed Cocklebur(2) Common chickweed Common grounsel Common mallow Common purslane Corn spurry Curly dock (seedling) Fiddleneck Florida pusley (Florida purslane)

Hedge mustard Jimsonweed(l) Kochia Ladysthumb Lambsquarters Mayweed Nightshade (annual) Pigweed(l) Pineappleweed Plantain Poorjoe Prickly sida (teaweed) Prostrate knotweed Prostrate spurge Ragweed (Common) Junglerice Stinkgrass (Indian lovegrass) Witchgrass Yellow foxtail

Russian thistle Shepherdspurse Smallflower galinsoga Smartweed (Pennsylvania) Sunflower(2) (wild, annual, common) Tarweed cuphea (Gumweed) Velvetleaf(1) Wild buckwheat Wild mustard Wild radish Wild turnip

(1)Under conditions such as low temperatures, lack of soil surface moisture or other factors that may cause delay in germination of the seeds, the effectiveness of Cynex DF may be impaired against these weeds.

(2)The degree of control will be reduced if soil moisture and temperature conditions cause deep germination of the seed.

#### CORN

#### PREEMERGENCE-PREPLANT INCORPORATED

Apply Cynex DF treatments just before, at or after planting but before crop has emerged. Avoid removal of treated soil from seed row prior to or during the planting operation.

Cynex DF may also be applied early prior to planting or in a split application if pre-season weed control is desired. For split applications, do not exceed the total amount of Cynex DF for the soil texture and organic matter shown in Table 1. If Cynex DF is applied early, more than 15 days before planting, a split application of Cynex DF or some other herbicide treatment may be necessary at or after planting to provide additional length of weed control. For further information see "Early Preplant" recommendations in the Conservation Tillage section of this label.

Rotary hoeing is recommended for preemergence applications which do not receive adequate rainfall or sprinkler irrigation to wet the top 2 inches of soil or depth of germinating weeds within about 10 days after application.

Cynex DF alone or in tank mix combinations should not be incorporated more than three inches deep to keep from burying the herbicide. Single or two pass incorporation with a tool such as a field cultivator operated at 5-7 mph is acceptable. A spike-toothed harrow, deep tillage disk or rolling basket device is not recommended for incorporating Cynex.

#### **Cynex DF Applied Alone**

Use the proper rate for the soil texture and organic matter indicated in Table 1. Any rotational crop may be planted in the fall or spring following this treatment.

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## TABLE 1PREEMERGENCE BROADCAST APPLICATION RATESPER ACRE FOR Cynex DF APPLIED ALONE ON CORN

	Pounds of Cynex DF**							
Soil Texture Description	Percent Organic Matter in soil*							
	Less than 1%	1%	2%	3%	4%	5% & Over		
Sand, Loamy sand	DO NOT USE	1.3	1.8	2.4	3.1	3.6		
Sandy loam	1.3	2.0	2.2	2.7	3.3	4.0		
Loam, Silt loam, Silt	1.8	2.2	2.7	3.3	4.0	4.4		
Sandy clay loam, Clay loam, Silty clay loam	2.2	2.7	3.3	4.0	4.4	4.9		
Sandy clay, Silty clay, Clay	3.1	3.3	4.0	4.4	4.9	5.3		
Peat or Muck	NOT RECOMMENDED							

\*\*Maximum rate limit per acre per year for all applications is 6.5 lbs. cyanazine (7.2 lbs. Cynex DF) except on highly erodible land with less than 30% plant residue cover, the rate limit is 3.0 lbs. cyanazine (3.3 Lb. Cynex DF)

#### **Cynex COMBINATIONS**

Cynex plus Atrazine

Use Cynex DF plus atrazine at the proper rate for soil texture and organic matter indicated in Tables 2 and 3. These tables provide rates for generally weedy conditions. The ratio of the amounts of each herbicide mar be adjusted as necessary for partic iar weed conditions as long as tie combined rate of the two products does not exceed the combined rate for the soil shown in Table 2 or 3. For grassier conditions use a ratio that contains higher levels of Cynex DF (3:1). For fields with more broadleaves use a ratio that contains higher levels of atrazine (1:1).

Rotational Crops: (1) Plant only corn, peanuts, sorghum, or soybeans the year following the use of this mixture. (2) If soybeans are to be planted, injury may occur due to the carryover of atrazine. (3) If applied after June 10, do not rotate with crops other than corn or sorghum tie next year or injury may occur. (4) In the high plains and intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required, use only when corn or

sorghum is to be planter the following year, or a crop of corn or sorghum not treated with atrazine is to precede other rotational crops. (5) Small grains may be planted 15 months following treatment. (6) Al. other crops may be planted 18 months after application.

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For all states except Kentucky, Missouri, Tennessee and Kansas east of Highway 99 use Table 2.

In Kentucky, Missouri, Tennessee and Kansas east of Highway 99 use Table 3.

TABLE 2PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FORTANK-MIX COMBINATIONS OF Cynex DF PLUS ATRAZINE 4L ON CORN								
FOR USE IN ALL	STATES E KAN	XCEPT KE NSAS EAST	NTUCKY, OF HIGH	MISSOUR WAY 99	I, TENNESS	SEE AND		
	Pounds of Cynex DF*** + Quarts of Atrazine 4L**							
		Per	cent Organi	ic Matter in	soil*			
Soil Texture Description	Less than 1%	1%	2%	3%	4%	5% & Over		
Sand, Loamy sand	DO NOT USE	0.9 +0.3	1.3 + 0.4	1.9 + 0.6	1.8 + 0.8	2.4 + 1.0		
Sandy loam	0.9 + 0.3	1.3 + 0.4	1.6 + 0.6	1.8 + 0.8	2.4 + 1.0	3.1 + 1.2		
Loam, Silt Ioam, Silt	1.3 + 0.4	1.6 + 0.6	2.2 + 0.8	2.4 + 1.0	3.1 + 1.2	3.6 + 1.3		
Sandy clay loam, Clay loam, Silty clay loam	1.6 + 0.6	2.2 + 0.8	2.4 + 1.0	3.1 + 1.2	3.6 + 1.3	3.8 + 1.4		
Sandy clay, Silty clay, Clay	2.2 + 0.8	2.4 + 1.0	3.1 + 1.2	3.6 + 1.3	3.8 + 1.4	4.0 + 1.6		
Peat or Muck			NOT REC	OMMENDED				

\*For organic matter content between those listed, adjust the rate proportionately.

\*\*If atrazine 80W is used, multiply rates shown by 1.25 to equal pounds of Atrazine 80W. If atrazine 90% is used, multiply rates shown by 1.11 to equal pounds of Atrazine 80W.

\*\*\*Maximum rate limit per acre per year for all applications is 6.5 lbs. cyanazine (7.2 lbs. Cynex DF) except on highly erodible land with less than 30% plant residue cover, the rate limit is 3.0 lbs. cyanazine (3.3 Lb. Cynex DF)

FOR USE ONLY IN A HIGHWAY 99	LL KENTU	CKY, MISSO	URI, TENNES	SEE AND K	ANSAS EAST	OF
		Pounds o	f Cynex DF +	Quarts of A	trazine 4L**	
		]	Percent Organ	ic Matter in s	oil*	
Soil Texture Description	Less than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	DO NOT USE	0.9 +0.5	1.1 + 0.5	1.6 + 0.6	1.9 + 0.8	2.5 + 1.0
Sandy loam	0.9 + 0.5	1.5 + 0.7	1.8 + 0.8	2.0 + 0.9	2.4 + 1.1	3.1 + 1.3
Loam, Silt loam, Silt	1.5 + 0.7	2.2 + 1.0	2.4 + i.1	2.7 + 1.2	3.1 + 1.3	3.6 + 1.3
Sandy clay loam, Clay loam, Silty clay loam	1.8 + 0.8	2.4 + 1.1	2.7 + 1.2	3.1 + 1.3	3.6 + 1.3	3.9 + 1.4
Sandy clay, Silty clay, Clay	2.2 + 1.0	2.7 + 1.2	3.1 + 1.3	3.6 + 1.3	3.9 + 1.4	4.2 + 1.5
Peat or Muck			NOT REC	OMMENDED		

TABLE 3

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#### Cynex DF plus LASSO 4EC

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Use Cynex DF at the proper rate for the soil texture and organic matter shown in Table 4 plus 2 quarts per acre of LASSO (Use 2.5 quarts of LASSO on clay soils containing 5 percent organic matter and over.) Any rotational crop may be planted the fall or spring following this treatment.

#### Cynex DF plus SUTAN+ 6.7E or ERADICANE 6.7E

Use Cynex DF at the proper rate for the soil texture and organic matter shown in Table 4 plus 1.8 quarts per acre of SUTAN+ or ERADICANE for control of many annual grasses and broadleaf weeds. (Use 2.4 quarts of SUTAN+ or ERADICANE on loam soils containing 5 percent or more organic matter, and on clay loams and clays containing 4 percent or more organic matter.) Do not use on sands and loamy sands having less than 1 percent organic matter in the light sandy soils of eastern coastal states. Do not use on corn seed stock.

Apply before planting. Incorporate the mixture immediately after application using power-driven cultivation equipment set for 2-3 inches in depth, or a tandem disc set to cut to a

depth of about 4 inches while operating at 4-6 mph. For thorough mixing, disc in two directions (cross disc), and totlow with a harrow, drag, or other leveling device. Prior to the second discing, readjust the disc to prevent cutting deeper than 4 inches. Cynex DF may be applied preemergence as an overlay over previously incorporated SUTAN+ or ERADICANE. Any rotation crop may be planted in the fall or spring following these treatments.

Existing stands of quackgrass, purple and yellow nutsedge must be turned-under and thoroughly chopped up prior to chemical treatments.

Additional-weeds controlled by SUTAN+ or ERADICANE combinations:

Grasses:	Sandbur
	Shattercane (Wild Cane)*
	Texas Panicum
	Quackgrass (ERADICANE only)
	Wild Proso Millet* (ERADICANE only)
Perennial Weeds:	Yellow Nutsedge (Nutgrass)

Purple Nutsedge (Nutgrass)

\*Suppression only - refer to SUTAN+ or ERADICANE label for appropriate supplemental cultural and tillage practices.

For fields with moderate to heavy infestations of these weeds refer to the SUTAN+ or ERADICANE label for appropriate higher rates.

#### Cynex DF plus DUAL 8E

Use Cynex DF at the proper rate for soil texture and organic matter shown in Table 4. Use DUAL as follows:

SOIL TEXTURE	BROADCAST RATE PER ACRE FOR "DUAL"
Coarse: Sand, Loamy sand, Sandy loam	1.25 - 1.5 pints
Medium: Loam, Silt loam, Silt	1.5 - 2.0 pints
Fine: Sandy clay ioam, Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay	1.5 - 2.5 pints

The low end of the rate range should be used for lowest organic matter soils and the rats increased as organic matter increases to a point that soils containing 4 percent organic matter or more require the highest rate shown for that soil texture. Refer to the DUAL label for precautions on rotational crops.

#### TABLE 4

#### PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR Cynex DF USED IN TANK-MIX COMBINATIONS WITH LASSO, SUTAN+, ERADICANE, OR DUAL ON CORN

	Pounds of Cynex DF***								
	<u>}</u>	Percent Organic Matter in soil*							
Soil Texture Description	Less than 1%	1%	2%	3%	4%	5% & Over			
Sand, Loamy sand	0.7**	0.9	1.3	1.6	1.8	2.2			
Sandy loam	0.9	1.3	1.6	1.8	2.2	2.4			
Loam, Silt Ioam, Silt	1.3	1.6	1.8	2.2	2.4	2.9			
Sandy clay loam, Clay loam, Silty clay loam	1.6	2.0	2.2	2.4	2.9	3.1			
Sandy clay, Silty clay, Clay	2.0	2.2	2.7	2.9	3.1	3.3			
Peat or Muck		NOT RECOMMENDED							
*For organic matter con	itent betwee	n those listed	, adjust the rate	e proportionate					

\*\*Do not use in the light sandy soils of the Atlantic Coastal Plain.

\*\*Maximum rate limit per acre per year for all applications is 6.5 lbs. cyanazine (7.2 lbs. Cynex DF) except on highly erodible land with less than 30% plant residue cover, the rate limit is 3.0 lbs. cyanazine (3.3 Lb. Cynex DF)

#### Cynex DF plus Atrazine plus LASSO, SUTAN+, ERADICANE, or DUAL

Use Cynex DF plus atrazine at the proper rate for soil texture and organic matter shown in Table 5. Use LASSO, SUTAN+, ERADICANE, or DUAL according to rates shown in "Cynex DF Combinations" in this section of the label. Rotational Crops: Refer to Rotational Crops section of "Cynex DF plus Atrazine" in this section of the label.

#### CONSERVATION TILLAGE WEED CONTROL

#### Early Preplant (EPP)

Cynex DF may be used for Early Preplant or Preemergence weed control for land going into production of corn under conservation tillage programs.

TABLE 5 PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR Cynex DF PLUS ATRAZINE 4L USED IN TANK-MIX COMBINATIONS WITH LASSO, SUTAN+, ERADICANE, OR DUAL ON COR:N							
	P	ounds of Cy	ynex DF +	Quarts of A	Atrazine 4L <sup>4</sup>	***	
		Pero	cent Organi	ic Matter in	soil*		
Soil Texture Description	Less than 1 %	1%	2%	3%	4%	5% & Over	
Sand, Loamy sand	0.5+0.2**	0.7 + 0.25	0.9 + 0.5	1.2 + 0.6	1.1 + 0.5	1.6 + 0.75	
Sandy loam	0.7 +0.25	0.9 + 0.5	1.2 + 0.5	1.1 +.0.5	1.6 + 0.75	1.8 + 0.75	
Loam, Silt Ioam, Silt	0.9 + 0.5	1.2 + 0.5	1.3 + 0.5	1.6 +0.75	1.6 + 0.75	2.0 + 0.75	
Sandy clay loam, Clay loam, Silty clay loam	1.2 + 0.5	1.3 + 0.5	1.6 +0.75	1.8 +0.75	2.0 + 0.75	2.2 + 0.75	
Sandy clay, Silty clay, Clay	1.3 + 0.5	1.6 + 0.75	1.8 +0.75	2.0 +0.75	2.2 + 0.75	2.2 + 1.0	
Peat or Muck			NOT REC	OMMENDED		· · · · ·	
*For organic matter **Do not use in the	content bet light sandy	ween those l soils of the	isted, adjust Atlantic Coa	the rate pro astal Plain.	oportionately	•	

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\*\*\*If atrazine 80W is used, multiply rates shown by 1.25 to equal pounds of Atrazine 80W. If atrazine 90% is used, multiply rates shown by 1.11 to equal pounds of Atrazine 80W.

Complete any planned early spring tillage prior to application. Apply herbicide treatment before weeds germinate or before weed seedlings are more than 3 inches tal. Tillage after application may reduce the effectiveness of the herbicide treatment. A nitrogen solution or

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complete fertilizer solution may replace all or part of the water as a carrier. The spray gallonage and spray boom design must be adequate to give thorough uniform coverage of the weed foliage. Follow label requirements of all products used in tank mix combinations.

Cynex DF alone or in combination with atrazine: Apply 15 to 30 days prior to planting. Use the proper rate for soil texture and organic matter indicated in Table 1, 2 or 3. In no-till corn where heavy crop residues exist, the rates, shown in Tables 1,2 or 3 should be increased by 25%.

Cynex DF plus PRINCEP 4L or PRINCEP CALIBER 90 or Cynex DF plus Atrazine plus PRINCEP 4L or PRINCEP CALIBER 90: Apply 30 days or more prior to planting. Use the proper rate of Cynex DF or of Cynex DF plus Atrazine for the soil texture and organic matter as shown in Table 1, 2 or 3 and add 1 quart/acre of PRINCEP 4L or 1.11 pounds/acre of PRINCEP CALIBER 90.

#### Burndown of Existing weeds:

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Combinations with 2,4-D: Where broadleaf weeds are present at the time of application, add 2,4-D LV Ester at 1 1/3 2 pts./A. (6 lb./gal.) or 2-3 pts./A. (4 lbs./gal.) (or 2,4-D Amine at recommended rates) plus nonionic surfactant at 1 qt./100 gals. of diluted spray, or other suitable surfactant at its recommended rate.

Combinations with Paraquat Products: When grasses are present and/or when existing weeds exceed 3 inches in height add 1-2 pts./A. (2 lbs./gal.) or 1.3 2.7 pts./A. (1.5 lbs./gal.) of paraquat. Well established weeds 6 inches tall or taller may not be well controlled.

Apply Cynex DF plus paraquat in at least 20 gal./A. of carrier by ground sprayer. (The volume of carrier and the application equipment must be adequate to give a uniform application.) Add nonionic surfactant at 1-2 qts./100 gals. of diluted spray (or other suitable surfactant at recommended rates) where paraquat is used. Crop oil concentrate or emulsible vegetable oil are not needed where paraquat is used.

Depending upon weather conditions following the EPP application, a postemergence treatment of Cynex DF or some other herbicide treatment may be necessary at or after planting to provide additional length of weed control. If desired, 1-1/2 to 2 pts./A. of DUAL 8E or 2 qts./A. of LASSO 4EC may be tank-mixed with the Cynex DF EPP treatment or applied preemergence at planting.

Rotational Crops: Refer to Rotational Crops section for each treatment in the Preemergence section of the label.

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#### At Planting

Cynex DF applied alone or in combination with atrazine and/or LASSO or DUAL according to the following directions will kill most existing small weeds and suppress many emerged perennial weeds when corn is planted into no-till stalk ground (corn, sorghum), stubble ground (soybean, small grains), and any minimum-till situation. This treatment then provides residual control of annual weeds as in conventional ullage.

Apply Cynex DF alone or with other products according to the directions for those treatments in the Preemergence section of the label.

Where heavy crop residues exist, the Cynex rate shown in Tables 1 through 5 should be increased by 25%. Add 0.5-1.0 pt./A. of 2,4-D LV (6 lbs./gal.) or 0.75 to 1.5 pts./A. (4 lbs./gal.) (or 2,4-D Amine at recommended rates). Add the 2,4-D to the spray tank last.

Use a minimum of 15 gals./A. of carrier. Complete spray coverage of the weeds is essential for best performance. Nitrogen solutions and complete liquid fertilizers are the preferred carriers for this treatment because they aid in the burndown of existing weeds. Add nonionic surfactant at 1-2 qts. per 100 gals. of diluted spray, or other suitable surfactant at its recommended rate. If water is used as a carrier, crop oil concentrate may be used as a surfactant. Apply before weeds exceed 3 inches in height. For control of existing alfalfa add 1/3 - 1/2 pt./A. of "Banvel", to the spray mixture. Apply before the alfalfa exceeds 6 inches in height.

For fields with existing sod grasses such as orchardgrass, bromegrass, rye or timothy, or when very dry conditions exist, or when existing weeds exceed 3 inches in height, add paraquat to the tank mix. Use 1 to 2 pts./A. (2 lbs./gal.) or 1.3 to 2.7 pts./A. (1.5 lbs./gal.) of paraquat in combination with Cynex as described above in this section, except the 2,4-D may be omitted, if desired, and the gallonage should be increased to 20-40 gals./acre to give thorough coverage of the weed growth. Do not apply paraquat in suspension type liquid fertilizer.

#### POSTEMERGENCE

Under dry, arid conditions of low humidity and the absence of dew formation at night, add a nonionic surfactant or an emulsible vegetable (EV) oil suitable for use on growing corn, at its recommended rate. Do not use petroleum-based crop oils. Addition of a surfactant or EV oil is not recommended under moist, rainy conditions and when dew forms at night because injury may occur.

Do not apply this treatment under cold, wet weather conditions or to corn growing under stress caused by weather, insects, disease, etc. Yellowing of the corn may result from this treatment, particularly if cold, adverse growing conditions occur after application. Extended or extreme cold and wet conditions may reduce stands.

Do not apply postemergence on popcorn, sweet corn or corn grown for seed.

#### Cynex Applied Alone

Use Cynex DF at the proper rate for the soil texture and organic matter shown in Table 6 or 7. Use rates shown in Table 6 if Cynex DF, or cyanazine or cyanazine/atrazine herbicides have not been applied to the soil this season. Use rates shown in Table 7 if Cynex DF, cyanazine or cyanazine/atrazine herbicides have been applied to the soil this season. This treatment may be used on peat or muck soils for burndown and suppression of existing weeds but will not provide residual control. Apply from crop emergence through the four-leaf stage of corn growth but before weeds exceed about 1-1/2 inches in height. Do not apply over the top of corn if the fifth leaf is visible. Apply in water only. Do not spray emerged corn plants with Cynex DF in a liquid fertilizer carrier.

Any rotational crop may be planted the fall or spring following this treatment.

#### TABLE 6 POSTEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR Cynex DF ON FIELD CORN

NO PRIOR APPLICATION OF Cynex DF, CONQUEST, OR OTHER CYANAZINE OR CYANAZINE/ATRAZINE HERBICIDES

- <u></u>		Pour	ids of Cynex D	F				
Soil Texture Description	Percent Organic Matter in soil*							
	Less than 1%	1%	2%	Over 2%				
Sand, Loamy sand	DO NOT USE	1.3	1.8	2.2				
Sandy loam	1.3	1.8	2.2	2.2				
Loam, Silt Ioam, Silt	1.8	2.2	2.2	2.2				
All other textures	2.2	2.2	2.2	2.2				
* For organic m	atter content betwee	n those listed	d, adjust the rate p	roportionately.				

TABLE 7POSTEMERGENCE BROADCAST APPLICATION RATES PERACRE FOR Cynex DF ON FIELD CORN							
Cynex DF OF HERBICIDES	R OTHER CYA S USED IN PRI	NAZINE OR	CYANAZI TON	INE/ATRAZINE			
		Pounds of	Cynex Dl	**			
		Percent Organ	ic Matter	in soil*			
Soil Texture Description	Less than 1%	1%	2%	Over 2%			
Sand, Loamy sand	DO NOT USE	DO NOT USE	1.5	1.5			
Sandy loam	DO NOT USE	DO NOT USE	1.8	2.2			
Loam, Silt Ioam, Silt	DO NOT USE	1.5	2.2	2.2			
All other textures	DO NOT USE	2.0	2.2	2.2			
*For organic proportionatel **Maximum r cyanazine (7.2 than 30% plar Cynex DF).	matter content b y. ate limits per ac 2 lbs. Cynex DF nt residue cover,	etween those list cre per year for b) except on hig the rate limit i	sted, adjus all applica hly erodib is 3.0 lbs.	t the rate ations is 6.5 lbs. le land with less cyanazine (3.3 lb			

#### **Cynex DF COMBINATIONS**

#### Cynex DF plus Atrazine

Apply as directed in "Postemergence-Cynex DF Applied Alone" section of this label. Use an amount of Cynex DF plus Atrazine equal to the rate shown in Table 6 or 7 for the proper soil texture and organic matter. To determine the amount of Cynex DF to use, multiply the rate in Table 6 or 7 by 0.7. To determine the amount of Atrazine 4L to use, multiply the rate indicated in Table 6. or 7 by 0.24. (Multiply by 0.3 for pounds of Atrazine 80W.) For the 2.5 lbs./A. rate shown in Table 6 or 7, use 1.75 lbs/A. of Cynex DF plus 0.6 qts/A. of Atrazine 4L or 0.75 lbs/A. of Atrazine 80W.

Rotational Crops: See Rotational Crops section in the "Preemergence Cynex DF plus Atrazine" section of this label.

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#### Cynex DF plus "Banvel"

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Apply as directed under "Postemergence - Cynex DF Applied Alone" section of this label. Add 1/2 to 2/3 pt./A. of BANVEL to the mixture. Do not use with a surfactant or emulsible vegetable oil.

#### SWEET CORN

Cynex DF may be applied preemergence or preplant incorporated for the control of annual grasses and broadleaf weeds in sweet corn.

NOTE: Cynex DF may cause injury or stand loss on new or "super sweet" varieties of sweet corn. Consult with Agricultural Extension Agencies and sweetcorn seed suppliers about the sensitivity of new varieties to potential injury.

Apply Cynex DF treatments just before, at or after planting but before crop has emerged. Avoid removal of treated soil from seedrow prior to or during the planting operation. Do not apply postemergence to sweet corn.

Rotary hoeing is recommended for preemergence applications which do not receive adequate rainfall or sprinkler irrigation to wet the top 1 1/2 to 2 inches of soil within about 10 days after application.

If a Cynex DF mixture is to be incorporated, except as noted, single or two pass incorporation is acceptable. Care should be taken to incorporate the Cynex DF mixture no deeper than the top two inches of soil.

#### **Cynex DF PLUS ATRAZINE**

Apply Cynex DF at the proper rate for soil texture and organic matter indicated in Table 8. Table 8 provides rates for generally weedy conditions. The ratio of the amounts of each herbicide may be adjusted as necessary for particular weed conditions as long as the combined rate of tie two products does not exceed the combined rate for the soil shown in Table 8. For grassier conditions use a ratio that contains higher levels of Cynex DF (3:1). For fields with more broadleaves use a ratio that contains higher levels of atrazine (1:1).

Rotational Crops: (1) Plant only corn, sorghum or soybeans the year following the use of this mixture. (2) If soybeans are to be planted, injury may occur due to the carryover of Atrazine. (3) If applied after June 10, do not rotate with crops other than corn or sorghum the next year or injury may occur. (4) Small grains may be planted 15 months following treatments. (5) All other crops may be planted 18 months after application.

#### Cynex DF PLUS LASSO 4EC

Use Cynex DF at the proper rate for the soil texture and organic matter shown in Table 9 plus 2 quarts per acre of LASSO. (Use 2.5 quarts LASSO, on clay soils containing 5 percent organic matter and over.) Any rotational crop may be planted the fall or spring following this treatment.

#### Cynex DF PLUS SUTAN+ 6.7L OR ERADICANE 6.7E

Use Cynex DF at the proper rate for the soil texture and organic matter shown in Table 9 plus 1.8 quarts per acre of SUTAN+ or ERADICANE for control of many annual grasses and broadleaf weeds. (Use 2.4 quarts of SUTAN+ or ERADICANE on loam soils containing 5 percent or more organic matter and clay loams and clays containing 4 percent or more organic matter.) Do not use on sands and loamy sands having less than 1 per-cent organic matter nor on the light soils of eastern coastal states. Do not use on corn grown for seed.

Apply before planting. Incorporate the mixture immediately upon application using power-driven cultivation equipment set for 2-3 inch depth, or tandem disc set to cut about 4 inches deep while operating at 4-6 mph. For thorough mixing, disc in two directions (cross disc), and follow with a harrow, drag, or other leveling device. Prior to the second discing, readjust the disc to prevent cutting deeper than 4 inches. Cynex DF may be applied preemergence as an overlay over previously incorporated SUTAN+ or ERADICANE, if desired. Any rotation crop may be planted in the fall or spring following these treatments.

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Existing stands of quackgrass, purple and yellow nutsedge must be turned under and thoroughly chopped up prior to chemical treatments.

#### TABLE 8 PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR TANK-MIX COMBINATIONS OF Cynex DF PLUS ATRAZINE 4L ON SWEET CORN

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	Pounds of Cynex DF*** + Quarts of Atrazine 4L**							
	Percent Organic Matter in soil*							
Soil Texture Description	Less than 1%	1%	2%	3%	4%	5% & Over		
Sand, Loamy sand	DO NOT USE	0.9+0.4	1.2+0.4	1.4+0.7	1.7+0.9	2.4+1.1		
Sandy loam	DO NOT USE	1.2+0.4	1.4+0.7	1.7+0.9	2.2+1.1	3.1+1.3		
Loam, Silt loam, Silt	DO NOT USE	1.4+0.7	1.7+0.9	2.2+1.1	2.8+1.3	3.6+1.3		
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	1.7+0.9	2.0+1.1	2.8+1.3	3.6+1.3	3.8+1.6		
Sandy clay, Silty clay, Clay	DO NOT USE	2.0+1.1	3.1+1.3	3.6+1.3	3.8+1.6	4.0+1.8		
Peat or Muck			NOT RECOM	MENDED				
*For organic matter	content between thos	e listed, adjus	t the rate prop	ortionately.				

\*\*If atrazine 80W is used, multiply rates shown by 1.25 to equal pounds of Atrazine 80W.

If atrazine 90% is used, multiply rates shown by 1.11 to equal pounds of Atrazine 80W.

\*\* \*Maximum rate limits per acre per year for all applications is 6.5 lbs. cyanazine (7.2 lbs. Cynex DF) except on highly erodible land with less than 30% plant residue cover, the rate limit is 3.0 lbs. cyanazine (3.3 lb Cynex DF).

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#### TABLE 9

#### PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR Cynex DF USED IN TANK MIX COMBINATIONS WITH LASSO, SUTAN+, ERADICANE OR DUAL ON SWEET CORN

			Pounds of	Cynex DF			
	Percent Organic Matter in soil*						
Soil Texture Description	Less than 1%	1%	2%	3%	4%	5% & Over	
Sand, Loamy sand	DO NOT USE	0.9 .	1.3	1.6	1.8	2.2	
Sandy loam	DO NOT USE	1.3	1.6	1.8	2.2	2.5	
Loam, Silt Ioam, Silt	DO NOT USE	1.6	1.8	2.2	2.5	2.9	
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	2.0	2.2	2.5	2.9	3.1	
Sandy clay, Silty clay, Clay	DO NOT USE	2.2	2.5	2.9	3.1	3.3	
Peat or Muck			NOT RECO	MMENDED	•		

Additional weeds controlled by SUTAN+, or ERADICANE combinations:

Grasses:	Sandbur		
	Shattercane (Wild Cane)*		
	Texas Panicum		
	Quackgrass (ERADICANE only)		
	Wild Proso Millet* (ERADICANE only)		
Perennial Weeds:	Yellow Nutsedge (Nutgrass)		
	Purple Nutsedge (Nutgrass)		

\*Suppression only - refer to SUTAN+ or ERADICANE label for appropriate supplemental cultural and tillage practices.

For fields with moderate to heavy infestations of these weeds refer to the SUTAN+ or ERADICANE labels for appropriate higher rates.

#### Cynex DF plus DUAL 8E

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SOIL TEXTURE	BROADCAST RATE PER ACRE FOR "DUAL"
Coarse: Sand, Loamy sand, Sandy loam	1.25 - 1.5 pints
Medium: Loam, Silt loam, Silt	1.5 - 2.0 pints
Fine: Sandy clay loam, Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay	1.5 - 2.5 pints

Use Cynex DF at the proper rate for soil texture and organic matter shown in table 9. Use DUAL as follows:

The low end of the rate range should be used for lowest organic matter soils and the rate increased proportionately as the organic matter increases. Soils containing 4 percent organic matter or more require the highest rate shown for that soil texture. Refer to the DUAL label for precautions or rotational crops.

	Pounds of Cynex DF + Quarts of Atrazine 4L** Percent Organic Matter in soil*						
Soil Texture Description	Less than 1%	1%	2%	3%	4%	5% & Over	
Sand, Loamy sand	DO NOT USE	0.7+0.2	0.9+0.4	1.1+0.5	1.2+0.6	1.6+0.6	
Sandy loam	DO NOT USE	0.9+0.4	1.1+0.5	1.2+0.6	1.6+0.6	1.8+0.6	
Loam, Silt Ioam, Silt	DO NOT USE	1.1+0.5	1.3+0.6	1.6+0.6	1.8+0.6	2.0+0.9	
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	1.3+0.6	1.6+0.6	1.8+0.6	2.0+0.9	2.2+0.9	
Sandy clay, Silty clay, Clay	DO NOT USE	1.6+0.6	1.8+0.9	2.0+0.9	2.2+0.9	2.2+1.1	
Peat or Muck	1		NOT RECOM	MENDED	- <b>i</b>		

If atrazine 90% is used, multiply rates shown by 1.11 to equal pourds of Atrazine 80W.

Cynex DF PLUS ATRAZINE PLUS LASSO, SUTAN +, ERADICANE OR DUAL

**NOTE:** Do not use combinations with SUTAN+, ERADICANE in New Jersey. Use Cynex DF plus Atrazine at we proper rate of soil texture and organic matter shown in Table 10. Use LASSO, SUTAN+, ERADICANE or DUAL according to rates shown in Cynex DF combinations in this section of the label.

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Rotational Crops: Refer to Rotational Crops section of Cynex DF plus Atrazine in this section of the label.

#### COTTON

#### IDLE SEASON EARLY PREPLANT WEED CONTROL (CALIFORNIA ONLY)

#### Weeds Controlled

Annual Bluegrass Annual Ryegrass Barnyardgrass\* Grasses Bristly Foxtail Rabbitsfoot Grass Volunteer Small Grains (suppression)

Wild Oat\* Yellow Foxtail

Annual henbit Black nightshade Burclover Cheeseweed\* Chickweed Fiddleneck

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Broadleaves Groundsel Knotweed Lambsquarters London rocket Marestail Miners lettuce

Pineapple weed Prickly lettuce Shepherdspurse Sowthistle Wild mustard Wild radish

\*Under soil moisture conditions favoring deep germination, these species may not be completely controlled.

Cynex DF may be used for burndown of small existing annual weeds and residual control of weeds during the winter and early spring season prior to planting cotton in California only. Complete any planned tillage prior to application. Apply herbicide treatment before weeds germinate or before weed seedlings are more than 3 inches tall. Tillage after application may reduce the effectiveness of the herbicide treatment.

Apply Cynex DF at least 30 days prior to planting. Apply the proper rate for the soil texture, organic matter and time interval between application and planting indicated in the Table 11. Where existing weeds are present, add crop oil concentrate, surfactant, or emulsible vegetable oil at its recommended rate to aid in the burndown of small weeds.

Where existing weeds are greater than 3 inches in height, when very dry conditions exist or where volunteer grains are a major problem, tank-mix Cynex DF with 1-2 pts./A. (2 lbs./gal.) or 1.3-2.7 pts./A. (1.5 lbs./gal.) of paraquat. Well established weeds 6 inches tall or taller may not be well controlled.

Apply Cynex DF plus paraquat in at least 20 gal./A. of carrier by ground sprayer. (The volume of carrier and the application equipment must be adequate to give a uniform application.) Add nonionic surfactant at 1-2 qts./100 gals. of diluted spray (or other suitable

surfactant at recommended rates) where paraquat is used. Crop oil concentrate or emulsible vegetable oil are not needed where paraquat is used. Do not apply paraquat combinations in suspension type fertilizer.

Cynex DF can also be tank-mixed with TREFLAN or PROWL and incorporated for fall listed cotton beds instead of surface applied as described above. Precautions: 1). Failure to wait the recommended time interval between application and planting may result in crop injury. 2). At least one inch of rainfall (r an equivalent irrigation that waters the surface of the soil after application must precede planting. 3). The use of this treatment on calcareous or caliche soil outcroppings may result in crop injury. 4). Do not graze or feed foliage from treated areas to livestock. 5). Do not apply Cynex DF to cotton land in irrigation water.

## TABLE 11BROADCAST APPLICATION RATES PER ACRE OF Cynex DF FOR IDLESEASON OR EARLY PREPLANT TREATMENT ON COTTON

Soil Texture Description	Pounds of Cynex DF** Days Prior to Planting*					
	Under 2%	Over 2%	Under 2%	Over 2%	Under 2%	Over 2%
	Sands, Loamy sands	1.75	2.25	2.75	3.25	3.25
All other Soils	2.25	2.75	3.25	4.0	4.0	4.5

\*For time intervals between those listed, adjust the rates proportionately.

\*\*Maximum rate limit per acre per year for all applications is 6.5 lbs. cyanazine (7.2 lbs. Cynex DF) except on highly erodible land with less than 30% plant residue cover, the rate limit is 3.0 lbs. cyanazine (3.3 Lb. Cynex DF)

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#### PREEMERGENCE

Apply preemergence on cotton only in the states of Alabama, Arkansas, Louisiana and Mississippi.

	Weeds Controlled
Annual morningglory	Prickly sida (Teaweed)
Cocklebur	Spurge

Cynex DF is a selective preemergence herbicide for early season weed control in cotton. Supplemental practices (such as Cynex DF applied directed Postemergence) may be necessary to control late season weeds. Cynex DF can be used in a tank-mix combination with ZORIAL

#### RAPID 80.

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Carefully match the Cynex DF rate with the soil texture. Do not use on fields where the soil texture changes from coarse to fine. Avoid overlapping tie spray pattern or overdosing the field with Cynex DF. Application rates above those recommended for the soil texture can result in yellowing or stunting of the crop and may result in stand reduction.

While cotton exhibits tolerance to Cynex DF, adverse growing conditions such as excessive rains, standing water or cold weather may result in stand reduction.

#### DO NOT GRAZE OR FEED FOLIAGE FROM TREATED AREAS TO LIVESTOCK.

#### Cynex DF plus ZORIAL RAPID 80

Apply Cynex DF plus ZORIAL RAPID 80 at the proper rate for the soil texture shown in Table 12. The soil must contain at least 1.0 percent organic matter. Seed placement should be 1/2-3.4 inch from the soil surface. Plant only cotton within six months after the last application of ZORIAL RAPID 80 or injury may occur.

#### **DIRECTED POSTEMERGENCE - LAYBY**

Cynex DF and tank-mix combinations may be applied directed post-emergence or layby to cotton and either preemergence to weeds or post-emergence to weeds in all cotton growing States.

#### Weeds Controlled

Annual morningglory*	Palmer amaranth
Bristly starbur	Pigweed (redroot and spiny)
Cocklebur	Prickly sida (Teaweed)
Crotalaria	Sicklepod
Jimsonweed	Spurge
Lambsquarters	Tropic croton
Nightshade (annual)	Wright groundcherry

\*The degree of reemergence control from a layby treatment will be reduced if soil moisture and temperature conditions cause deep germination of the seed.

Apply before weeds are more than 2 inches tall. Apply the directed postemergence treatment after the cotton has attained the minimum height of 6 inches. For layby treatment, apply Cynex DF after the cotton has attained the height of 12 inches or more.