



AGRICULTURAL PRODUCTS

..... A Growing Partnership With Nature

Reg # 352-441

PM-25

SUPPLEMENTAL LABELING 123

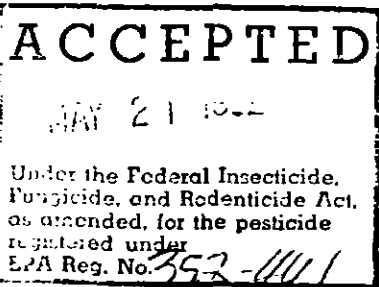


ASSURE® HERBICIDE
WEED CONTROL IN COTTON

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EPA REG. NO. 352-441

WEED CONTROL IN COTTON



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 through any type of irrigation system.

Du Pont "Assure" Herbicide should be used only in accordance with recommendations on this label or in separately published Du Pont recommendations.

Du Pont will not be responsible for losses or damages resulting from the use of this product in any manner not specifically recommended by Du Pont.

GENERAL INFORMATION

"Assure" is a selective postemergence herbicide recommended for the control of annual and perennial grasses in cotton. "Assure" does not control sedges or broadleaf weeds.

Applied at recommended rates and timings "Assure" Herbicide will control emerged grasses. Subsequent flushes of grass weeds require additional treatment.

Most grass crops, including wheat, barley, rye, oats, sorghum, rice and corn are highly sensitive to "Assure" Herbicide and all direct or indirect contact (such as spray drift) should be avoided.

When not in use, keep container closed to prevent evaporation or loss through spillage.

APPLICATION INFORMATION - GENERAL

TIMING TO WEEDS

Apply "Assure" Herbicide postemergence to actively growing grasses according to the rate charts below. Applications made to grass plants stressed due to insufficient moisture or cold temperatures, or to grass plants exceeding the stage of growth recommended in the rate table may result in unsatisfactory control.

In arid regions where irrigation is used, apply "Assure" Herbicide as soon as possible after an irrigation.

GEOGRAPHIC RECOMMENDATIONS

The grasses controlled by "Assure" and the rates needed for control differ by geographic location. A description of the area boundaries is as follows:

AREA I — (Areas with Adequate Rainfall)

Encompasses most of the eastern half of the United States. It is characterized as having adequate rainfall to support crop production and generally does not require irrigation during the growing season. States included in area I are: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma (broadly defined as east of Interstate 35), South Carolina, Tennessee, Texas (broadly defined as east of Interstate 35) and Virginia.

AREA II — (Arid Conditions)

Those areas characterized as having arid conditions and in many locations requiring irrigation during the growing season. This encompasses Oklahoma (broadly defined as west of interstate 35) and Texas (broadly defined as west of interstate 35).

**Note: Not for use in Arizona, California, and New Mexico.

**Note: Applications of "Assure" herbicide should be made to actively growing grasses. If a field is to receive an irrigation, wait until after the irrigation to apply "Assure" Herbicide.

ENVIRONMENTAL CONDITIONS

Conditions conducive to healthy, actively growing plants optimize the performance of "Assure". Applications made to grasses which are stressed from abnormal weather (hot or cold) from growing conditions such as drought or water saturated soils, or prior herbicide injury may result in unsatisfactory control. Grass weeds under this condition frequently become less sensitive to herbicide activity. Delay application until the stress passes and weeds and crop start to grow again.

Do not apply if rain is expected within 1 hour of application as control may be unsatisfactory

SPRAY VOLUMES

Ground Application: Use a minimum of 10 gallons of water per acre in Area I (Adequate Rainfall). Use a minimum of 15 gallons of water per acre in Area II (Arid Conditions). Do not exceed 40 gallons of water per acre in Area I or Area II.

Aerial Application: Use a minimum of 2 gallons of water per acre.

SPRAY ADDITIVES

ALWAYS INCLUDE A SPRAY ADJUVANT WITH APPLICATIONS OF "ASSURE". Unless otherwise directed, select one of the adjuvants listed below.

Ground Applications: Crop oil concentrate at a rate (concentration) of 1.0% v/v (4 quarts per 100 gallons of water as the spray solution).

OR

Nonionic surfactant at a rate (concentration) of 0.25% v/v (1 quart per 100 gallons of water as the spray solution).

Aerial Application: Crop oil concentrate at a rate (concentration) of 0.5% v/v (2 quarts per 100 gallons of water as the spray solution).

OR

Nonionic surfactant at a rate (concentration) of 0.25% v/v (1 quart per 100 gallons of water as the spray solution).

Petroleum oil concentrates should be of good quality and contain a minimum of 15% emulsifier/surfactant. Nonionic surfactants should contain at least 80% active ingredient. Do not use vegetable (crop origin) oils as spray adjuvant or carrier with "Assure". **USE ONLY EPA APPROVED OIL CONCENTRATES AND SURFACTANTS.**

CULTIVATION

Cultivation during or within 7 days before or 7 days after an application of "Assure" may result in unsatisfactory control. Cultivation may put grasses under stress by pruning roots, thus making control more difficult to obtain.

RESTRICTIONS

Do not graze treated fields or harvest for forage or hay.

Do not apply more than 40 ounces of product per acre per season.

CROP RESPONSE

Minor leaf spotting may occur to sprayed foliage under certain environmental conditions. New growth and crop yields are unaffected.

TIMING OF APPLICATIONS

"Assure" may be applied to cotton any time prior to 80 days before harvest.

Best results are obtained when "Assure" is applied to grasses that are young and actively growing. Applications made to grasses that are larger than the size indicated below, to grasses under stress, or in tank mixtures with broadleaf herbicides, may result in less than satisfactory control. Degree of control and

duration of effect depend on: rate used, weed spectrum, weed size and variability, growing conditions at and following treatments, soil moisture, precipitation, tank mixtures, and spray adjuvant used.

**WEEDS CONTROLLED/RATE CHARTS
AREA I (AREAS WITH ADEQUATE RAINFALL)
(See GEOGRAPHIC RECOMMENDATIONS)**

ANNUAL GRASSES	SIZE AT APPLICATION (INCHES)	"ASSURE" OZ PRODUCT/A
Volunteer Corn (<i>Zea mays</i>)	6-18	10
Shattercane (<i>Sorghum bicolor</i>)	6-12	10
Seedling Johnsongrass (<i>Sorghum halepense</i>)	2-8	10
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Crowfootgrass (<i>Dactyloctenium aegyptium</i>)	2-6	14
Fall Panicum (<i>Panicum dichotomiflorum</i>)	2-6	14
Foxtails		
Giant (<i>Setaria faberi</i>)	2-8	14
Green (<i>Setaria viridis</i>)	2-4	14
Yellow (<i>Setaria lutescens</i>)	2-4	14
Bristly (<i>Setaria verticillata</i>)	2-4	14
Goosegrass (<i>Eleusine indica</i>)	2-6 ^a	14
Itchgrass (<i>Rottboellia cochinchinensis</i>)	2-8	14
Field Sandbur (<i>Cenchrus incertus</i>)	2-6	14
Sprangletop (<i>Leptochloa filiformis</i>)	2-6	14
Volunteer Cereals		
Wheat (<i>Triticum aestivum</i>)	2-6	14
Barley (<i>Hordeum vulgare</i>)	2-6	14
Oats (<i>Avena sativa</i>)	2-6	14
Rye (<i>Secale cereale</i>)	2-6	14
Wild Oat (<i>Avena fatua</i>)	2-6	14
Witchgrass (<i>Panicum capillare</i>)	2-6	14
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Barnyardgrass (<i>Echinochloa crus-galli</i>)	2-6	16
Broadleaf signalgrass (<i>Brachiaria platyphylla</i>)	2-6	16
Crabgrass		
Large (<i>Digitaria sanguinalis</i>)	2-6 ^a	16
Smooth (<i>Digitaria ischaemum</i>)	2-6 ^a	16
Junglerice (<i>Echinochloa colona</i>)	2-6	16
Red Rice (<i>Oryza sativa</i>)	1-4	16
Texas panicum (<i>Panicum texanum</i>)	2-4	16

PERENNIAL GRASSES

Bermudagrass (<i>Cynodon dactylon</i>)	3" tall (or up to 6" runners)	20
Rhizome Johnsongrass (<i>Sorghum halepense</i>)	10-24	20

If regrowth of perennial grasses occurs, make another application of "Assure" using 14 ounces product/A timed to grass weed sizes as follows: Bermudagrass (3" tall or up to 6" runners), Rhizome Johnsongrass (6"-10"). Do not exceed 40 ounces of product per acre per year.

^a Length of lateral growth

AREA II (ARID CONDITIONS)
(See GEOGRAPHIC RECOMMENDATIONS)

ANNUAL GRASSES	SIZE AT APPLICATION (INCHES)	"ASSURE" OZ PRODUCT/A
Volunteer Corn (<i>Zea mays</i>)	6-10	14
Shattercane (<i>Sorghum bicolor</i>)	6-10	14
Seedling Johnsongrass (<i>Sorghum halepense</i>)	2-6	14
Field Sandbur (<i>Cenchrus incertus</i>)	2-6	14
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Barnyardgrass (<i>Echinochloa crus-galli</i>)	2-4	16
Broadleaf Signalgrass (<i>Brachiaria platyphylla</i>)	2-4	16
Large Crabgrass (<i>Digitaria sanguinalis</i>)	2-4 ^a	16
Foxtails		
Green (<i>Setaria viridis</i>)	2-4	16
Yellow (<i>Setaria lutescens</i>)	2-4	16
Junglerice (<i>Echinochloa colona</i>)	2-4	16
Texas Panicum (<i>Panicum texanum</i>)	2-4	20
Volunteer cereals		
Wheat (<i>Triticum aestivum</i>)	2-4	16
Barley (<i>Hordeum vulgare</i>)	2-4	16
Oats (<i>Avena sativa</i>)	2-4	16
Rye (<i>Secale cereale</i>)	2-4	16

PERENNIAL GRASSES

Bermudagrass (<i>Cynodon dactylon</i>)	3" tall (or up to 6" runners)	24
Rhizome Johnsongrass (<i>Sorghum halepense</i>)	10-16	24

If regrowth of perennial grasses occurs, make another application of "Assure" using 16 ounces product/A timed to grass weed sizes as follows: Bermudagrass (3" tall or up to 6" runners) Rhizome Johnsongrass (6"-10"). Do not exceed 40 ounces of "Assure" per acre per season.

^a Length of lateral growth.

SEQUENTIAL APPLICATIONS WITH POST BROADLEAF HERBICIDES

NOTE: Reduction in grass control is possible when "Assure" is applied immediately prior to or sequentially after an application of a post broadleaf herbicide. Observe the following recommendations.

- After applying "Assure", wait a minimum of 24 hours before applying a post broadleaf herbicide.
- In fields treated with a post broadleaf herbicide, do not apply "Assure" until grass plants begin to develop new leaves (generally 7 days after the post broadleaf herbicide application).

SEQUENTIAL APPLICATIONS FOR JOHNSONGRASS CONTROL

For control of rhizome johnsongrass in the states of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Tennessee, and Virginia, "Assure" may be applied at a reduced rate when applied in a sequential application program.

Apply "Assure" at a rate of 10 ounces per acre when johnsongrass is 10 to 24 inches tall. Apply the sequential treatment of "Assure" at a rate of 10 ounces per acre when johnsongrass regrowth has reached 6 to 10 inches in height.

Do not apply "Assure" in a tank mix with post broadleaf herbicides when using this reduced rate sequential application program.

SPOT/SMALL AREA SPRAY RECOMMENDATIONS IN COTTON (AREAS I AND II)

Make a 3/4 percent solution of "Assure" in water for spot treatment of annual species such as volunteer corn or perennial species such as rhizome johnsongrass. The spray solution should include a nonphytotoxic oil concentrate at 1% v/v or a nonionic surfactant at 0.25% v/v. Treat plants on a spray-to-wet basis insuring good coverage.

Desired Spray Volume	"ASSURE"			Crop Oil Concentrate OR Nonionic Surfactant
	OZ Product	PLUS	OZ	
1 gallon	1.0 fl. oz. (2 tbsp)		1.25 fl. oz. (2.5 tbsp)	0.3 fl. oz. (2 tsp)
25 gallons	24.0 fl. oz. (1 quart)		32 fl. oz. (1 cup)	8.0 fl. oz.
50 gallons	48 fl. oz. (1.5 quarts)		64 fl. oz. (2 quarts)	16 fl. oz. (1 pint)
100 gallons	96 fl. oz. (3 quarts)		128 fl. oz. (4 quarts)	32 fl. oz. (1 quart)

SPRAY DRIFT

Do not allow spray from either ground or aerial equipment to drift onto adjacent crops or land, as injury to other plants may occur. To minimize spray drift, refer to the detailed directions in the "spray drift" section of the "Assure" product label.

IMPORTANT

BEFORE USING "ASSURE" HERBICIDE READ AND CAREFULLY OBSERVE THE CAUTIONARY STATEMENTS AND ALL OTHER INFORMATION APPEARING ON THE PRODUCT LABEL.

This bulletin contains new or supplemental instructions for use of this product which may not appear on the package label. Follow the instructions carefully.

This labeling must be in the possession of the user at the time of pesticide application.

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