

PM25

10182-222

1437

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Wayne R. Hillebrecht
Regulatory Product Manager
Zeneca Ag Products
P.O. Box 751
Wilmington, DE 19897

Subject: Sutan 6.7-E Selective Herbicide
EPA Reg. No. 10182-222
Label Reformatting & Environmental Hazard Statement
Your Submission Dated July 14, 1993

Dear Mr. Hillebrecht:

The revised label submitted in connection with registration under FIFRA is acceptable.

This acceptance of your label does not relieve you of any obligation to comply with the Worker Protection Standard (WPS). Under the WPS labeling regulations at 40 CFR part 156, subpart K, section 156.200(c)(3), you are prohibited from distributing or selling any product within the scope of the WPS requirements after April 21, 1994, without amended labeling accepted by the Agency.

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

Sincerely,

Robert J. Taylor
Product Manager (25)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

CONCURRENCES

SYMBOL	H7505C						
SURNAME	Calvin						
DATE	7-19-93						

**SUTAN+® 6.7-E
Selective Herbicide**

A Selective Emulsifiable Preplant Incorporated Liquid
Herbicide for Annual Grass Control in Field, Sweet, Pop, and Silage Corn

COMPLETE DIRECTIONS FOR USE

EPA Reg. No. 10182-222

ACCEPTED
with COMMENTS
in EPA Letter Dated:

JUN. 1 1982

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
is amended for the pesticide
registered under EPA Reg. No.
10182-222

Made in U.S.A.
ZENECA Ag Products
ZENECA Inc.
Wilmington, DE 19897

BEST AVAILABLE COPY

KEEP OUT OF REACH OF CHILDREN

CAUTION

ACTIVE INGREDIENT:	
S-Ethyl diisobutylthiocarbamate	85.1%
INERT INGREDIENTS:	<u>14.9%</u>
Total	100.0%

Contains 6.7 pounds of active ingredient per gallon

STATEMENT OF PRACTICAL TREATMENT

FIRST AID

If a known exposure occurs or is suspected, immediately initiate the recommended procedures below. If further treatment is required, contact a Poison Control Center, a physician, or the nearest hospital.

IF SWALLOWED: Immediately give several glasses of water but **DO NOT** induce vomiting. If vomiting does occur, give fluids again. Have a physician determine if condition of patient will permit evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

IF IN EYES: Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart during flushing to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

IF ON SKIN: Immediately flush all affected areas with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention if skin irritation occurs. Wash clothing before reuse.

IF INHALED: Remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

4721

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

HARMFUL IF SWALLOWED. Avoid contact with skin, eyes, and clothing. Avoid breathing spray mist. Wear goggles, rubber gloves, and protective clothing. Wash skin with soap and water immediately after contact. Flush eyes with water.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. When applied through sprinkler irrigation method of application, the area being treated must be vacated by unprotected persons.

ENVIRONMENTAL HAZARDS

~~Do not apply directly to water or wetlands.~~ For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Cover or incorporate spills.

2 of 31

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

GENERAL INFORMATION

SUTAN+® 6.7-E selective herbicide is mixed (incorporated) or injected into the soil for control or suppression of weeds listed in Tables 1 and 2 of this label. SUTAN+ 6.7-E controls annual grasses as their seeds germinate by interfering with normal germination and seedling development. It does not control established weeds.

GENERAL USE PRECAUTIONS

- Read all label directions before using.
- SUTAN+ 6.7-E can be stored at temperatures as low as minus 50°F.
- SUTAN+ 6.7-E is recommended for use only on mineral soils or those soils containing less than 10% organic matter.
- SUTAN+ 6.7-E should not be used on milo or sorghum.
- SUTAN+ 6.7-E should not be used on corn seed stock such as Breeders, Foundation, or Increase.
- SUTAN+ 6.7-E can be used on production seed corn.
- Do not contaminate irrigation water used for crops other than corn or water used for domestic purposes.
- Do not apply SUTAN+ 6.7-E before preirrigation in irrigated areas.
- Do not allow SUTAN+ 6.7-E to contaminate feed or food.
- SUTAN+ 6.7-E should not be stored near seeds, fertilizers, or foodstuffs.
- All containers of SUTAN+ 6.7-E should be kept tightly closed when not in use.
- Do not use in Arizona except on field and silage corn at elevations of 2500 feet or higher.
- Do not use in the ten southernmost California counties except Kern. In Kern county SUTAN+ 6.7-E may only be used on field and silage corn.
- Applied according to directions and under normal growing conditions, SUTAN+ 6.7-E will not harm the treated crop. During germination and early stages of growth, extended periods of unusually cold and wet or hot and dry weather, insect or plant disease attack, carryover pesticide residues, the use of certain soil-applied systematic insecticides, improperly placed fertilizers or soil insecticides may create abnormal conditions that weaken seedlings. SUTAN+ 6.7-E used under these abnormal conditions could result in crop injury.

- When applied according to directions and when conditions exist for normal plant growth through the season, no harmful residues of SUTAN+ 6.7-E should remain beyond harvest. In the Southeastern U.S., when SUTAN+ 6.7-E is used for weed control in silage corn, do not plant small seeded grains until September following corn harvest.

APPLICATION DIRECTIONS

Carriers

- **Liquids** - Either water or fluid fertilizers such as solutions, slurries, or suspensions may be used as liquid carriers. If fluid fertilizers are used, a physical compatibility test with these must be done before combining in the spray tank. See Appendix I for details of the compatibility testing procedure. Even if SUTAN+ 6.7-E is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.
 - If there is a delay between applications and incorporation when liquid carriers are used, then the application must be made to a soil surface dry to at least 1/2 inch deep and free from dew and incidental moisture and must be incorporated within 4 hours.
- **Dry bulk fertilizer** - SUTAN+ 6.7-E may be impregnated on dry bulk fertilizer except nitrate fertilizers and applied as the fertilizer is spread.
 - Bulk fertilizer impregnated with SUTAN+ 6.7-E alone or in tankmix combinations should be applied immediately, not stored.
 - It is recommended that all bulk containers be tightly covered while the product is being transported and applied to reduce probability of SUTAN+ 6.7-E loss via volatilization.
 - Any application using impregnated materials that are not immediately incorporated in the same operation must be made to a soil surface dry to at least 1/2 inch deep and free from dew and incidental moisture and incorporated the same day.
 - Uniform distribution of SUTAN+ 6.7-E on fertilizer particles and uniform application are necessary to assure good results.
 - See APPENDIX II and consult your local dealer for details including what fertilizers are compatible.

Adding to Spray Tank:

If SUTAN+ 6.7-E is used alone:

- Add the recommended amount to a clean (thoroughly rinsed and decontaminated) spray tank before it is half filled so that addition of the remaining water or fluid fertilizer carrier can aid in the thorough agitation and mixing of the spray solution.

If a tank mixture is used:

- The order of mixing should be (1) wettable powders, (2) dry flowables, (3) liquid flowables, and (4) ECs last.

Volume and Agitation:

- Apply in 10 to 50 gallons of water or fluid fertilizers per acre using a properly calibrated sprayer having good agitation.
- Use higher gallonage in arid areas.

Pressure and Nozzles:

- Use either flood, fan, or swirl chamber nozzles on a boom type sprayer that has been properly calibrated.

Soil Moisture and Tillth:

- Improper incorporation or poor tillth such as large clods may result in erratic or unsatisfactory weed control.
- The soil should be dry enough to permit good soil mixing or incorporation.
- Loss of weed control will result from any delay in incorporation if SUTAN+ 6.7-E is applied to a moist soil surface.
- Delayed applications must be made on a soil surface dry to 1/2 inch deep and free from dew and incidental moisture.

Incorporation Timing:

- Application and incorporation should be done in the same operation when possible.
- If there is a delay between application and incorporation, see the comments on soil moisture and time allowable under Liquid Carriers and Dry Bulk Fertilizer Carriers above.

Incorporation Equipment and Methods:

SUTAN+ 6.7-E must be incorporated into the soil to prevent loss of the herbicide. Thorough mixing is necessary for uniform weed control.

Power driven cultivation equipment:

- Soil should have previous primary tillage.
- Ground speed must be adjusted with PTO to ensure thorough incorporation.
- Set horizontal action tine equipment to cut 4 to 6 inches deep.
- Set vertical action tine equipment to cut 3 to 4 inches deep.

Tandem disc

- Can be used on all soil types
- Set disc to cut 4 to 6 inches deep.
- Operate disc at 4 to 6 MPH.
- Follow disc by a harrow or leveling device slightly wider than the disc.
- Two passes in different directions will improve incorporation.
- On the second pass the disc should be operated shallower than on the first pass.
- If deep germinating weeds are present, a second incorporation will improve control or suppression. Weeds which fall into this category are: shattercane, seedling Johnsongrass, and nutsedge.

Field cultivator

- Recommended for use on lighter soils in good tillth.
- Equip with 3 to 4 rows of sweeps spaced at 7 inches or less and staggered from row to row to leave no soil unturned or undisturbed.
- Set the field cultivator to cut 4 to 6 inches deep.
- Operate the field cultivator at 5 MPH or more.
- Follow by a harrow or leveling device.
- Chisel plows or points should not be used.
- Two passes in different directions will improve incorporation.
- If deep germinating weeds are present, use a tandem disc for the first pass. Weeds which fall into this category are: shattercane, seedling Johnsongrass, and nutsedge.

Till 'N bed Conditioner

- Recommended for bedded fields of all soil types in good tillth.
- Till 'N Bed equipment is most effective on well peaked beds.
- Low beds require two passes for effective incorporation.

- Set the tillers or choppers to a depth of 4 to 6 inches.
- Operate the conditioner at 5 to 7 MPH.
- To ensure moisture conservation and proper mixing of SUTAN+ 6.7-E, set the disc hippers to run only in the upper loose soil of the bed.
- Do not use in fields with excessive trash and or moisture.
- For more effectiveness on rhizome Johnsongrass, shattercane, and nutsedge, a row disc should be run the winter prior to SUTAN+ 6.7-E use to chop up rhizomes and to destroy vegetating nutsedge tubers and early germinating seeds.

Subsurface injection before or at planting

- Use only in the Southeastern U.S.
- See Table 1 Comments and Restrictions section for use rates.
- Do not use when SUTAN+ 6.7-E is tank mixed with another product.
- Special equipment designed for subsurface application must be used.
- Injector units must be rigidly mounted on, immediately ahead of, or immediately behind the planter unit.
- Coultter and injector shanks must be spaced 3 1/2 inches apart.
- The two shanks adjacent to the drill row must be 1 3/4 to 2 inches on either side of it.
- Mount injectors in staggered positions to avoid trash buildup.
- Injectors must be set to inject SUTAN+ 6.7-E below the soil surface.
- The width of the band in which weed control is desired will determine the number of injectors required per row. For example: 4 injectors spaced 3 1/2 inches apart give a 14 inch band.
- Broadcast applications can be made by increasing the number of shanks.
- Seal injector openings by using a roller or chain drag behind the injectors.
- Apply in 20 to 50 gallons of water per acre.

Center Pivot Sprinkler

- SUTAN+ 6.7-E can be applied and incorporated by this method before or immediately after planting before corn or weeds have emerged at the rates recommended for the specific weed.
- Application and incorporation should be done after last tillage operation and before weeds germinate.
- Meter the herbicide during entire irrigation period.
- Apply in 1/2 to 1 inch of water or sufficient water to penetrate the soil to a depth of 5 to 7 inches.
- SUTAN+ 6.7-E should be diluted no more than 1 part of SUTAN 6.7-E to 4 parts of water or fluid fertilizer on a volume basis and good agitation must be maintained during the entire application period.
- Apply only through center pivot sprinkler irrigation systems. Do not apply through any other type of system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- Questions about calibration should be directed to your State Extension Service specialist, equipment manufacturers, or other experts.
- Do not connect an irrigation system, including greenhouse systems, used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

9 of 37

USE PRECAUTIONS:

- The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- The system must use a metering pump, such as a positive displacement injection pump effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Apply during low or no wind conditions to avoid drift.

Weeds Controlled and Use Rates:

- Consult Tables 1 and 2 below.
- NOTE COMMENTS AND RESTRICTIONS IN TABLES 1 AND 2.

**SUTAN+ 6.7-E
BROADCAST RATE PER ACRE**

TABLE 1

ANNUAL GRASSES	SCIENTIFIC NAME	USE RATE IN PINTS	COMMENTS AND RESTRICTIONS
Barnyardgrass (Watergrass)	<i>Echinochloa crus-galli</i>	4 3/4	<p>GENERAL:</p> <ul style="list-style-type: none"> • Should weeds develop, a shallow cultivation at no more than 2 inches depth, followed by incorporation or injection will generally result in better control. • Use the higher rates for medium and fine textured soils. <p>SUBSURFACE INJECTION APPLICATIONS:</p> <ul style="list-style-type: none"> • Use is limited to the Southeastern U.S. only. • Use 3 3/4 pints of SUTAN+ 6.7-E per broadcast acre, proportionately depending upon the row spacing to be used. <p>FALL APPLICATIONS:</p> <ul style="list-style-type: none"> • Do not use fall application for suppression of shattercorn. • Use only in Minnesota, northern Iowa north of I-80, northern Missouri east of Highway 14, South Dakota east of Missouri River, and Nebraska north of I-80. • Apply and incorporate 7 1/3 pints per acre in the late summer or early fall. • Impregnated dry bulk fertilizer may be used in fall applications. <p>ARIZONA FIELD AND SILAGE CORN GROWN AT 2500 FEET ELEVATION:</p> <ul style="list-style-type: none"> • Use 3 3/4 to 4 3/4 pints of SUTAN+ 6.7-E per acre. • Use the higher rate on medium to fine textured soils. • Use 4 3/4 pints of SUTAN+ 6.7-E for nutsedge control.
Bermudagrass (seedling)	<i>Cynodon dactylon</i>	4 3/4 - 7 1/3	
Crabgrass	<i>Digitaria spp.</i>	4 3/4	
Foxtail, giant	<i>Setaria faberi</i>	4 3/4	
Foxtail, green	<i>Setaria viridis</i>	4 3/4	
Foxtail, yellow	<i>Setaria lutescens</i>	4 3/4	
Goosegrass	<i>Eleusine indica</i>	4 3/4	
Johnsongrass (seedling) ¹	<i>Sorghum halepense</i>	4 3/4 - 7 1/3	
Panicum, fall	<i>Panicum dichotomiflorum</i>	4 3/4	
Panicum, Texas ^{1,2}	<i>Panicum texanum</i>	4 3/4 - 7 1/3	
Sandbur, field ¹	<i>Cenchrus paciflorus</i>	4 3/4	
Sorghum, volunteer ¹	<i>Sorghum spp.</i>	4 3/4	

¹Cultivation is suggested in addition to SUTAN+ 6.7-E treatment with moderate to heavy infestations.

²Southeastern U.S. only.

SUTAN+ 6.7-E
 BROADCAST RATE PER ACRE

TABLE 2

ANNUAL GRASSES	SCIENTIFIC NAME	USE RATE IN PINTS	COMMENTS AND RESTRICTIONS
Shattercane (Suppression only)	<i>Sorghum vulgare</i>	7 1/3	<ul style="list-style-type: none"> • Apply and incorporate immediately before planting for suppression and reduced early competition from shattercane. • On continuous corn acreage with a high shattercane seed population, rotate to another crop such as soybeans to control the population in alternate years. • Suppression may be improved if all the following practices are followed: <ul style="list-style-type: none"> - fall or spring moldboard plowing. - soil should be well-worked with a disc and dry enough to permit good incorporation of the herbicide. - all trash should be worked into the soil before application. - delay application until soil warms to a constant 55 degrees or higher temperature. - plant immediately after application and incorporation. - cultivate immediately if shattercane emerges. This cultivation should be shallower than the depth of the SUTAN+ 6.7-E herbicide.
Nutsedge, purple Nutsedge, yellow	<i>Cyperus rotundus</i> <i>Cyperus esculentus</i>	4 3/4 - 7 1/3	<ul style="list-style-type: none"> • Use the higher rates on medium and fine textured soils and for heavy infestations. • Existing stands of nutsedge must be turned and chopped thoroughly before treatment. • Cultivation is recommended in addition to SUTAN+ 6.7-E in fields with moderate to heavy infestations.

1/28/37

- Corn can be planted again without working the field if circumstances such as flooding, insects, or disease result in a poor stand of corn.

Cultivation:

- Should weeds develop, a shallow cultivation or rotary hoe will generally result in better weed control.
- A shallow cultivation is less than 1/2 the depth of incorporation.

Band Applications:

For band applications, calculate the amount to be applied per acre as follows:

$$\frac{\text{Band width in inches}}{\text{Distance between rows in inches}} \times \text{Rate per acre for a broadcast treatment} = \text{Amount needed for a band treatment}$$

TANKMIX COMBINATIONS

ATRAZINE, BLADEx® HERBICIDE AND PRINCEP® HERBICIDE/CALIBER® HERBICIDE COMBINATIONS

- For control of a broader spectrum of weed and increased control of labelled grasses; atrazine, Bladex or Princep, or a combination of atrazine and Bladex may be tank mixed and applied preplant incorporated with recommended use rates of SUTAN+ 6.7-E.
- Do not apply atrazine, Bladex, or Princep/Caliber through any irrigation system.
- Atrazine and Bladex combinations may be impregnated on dry bulk fertilizer. See APPENDIX II and consult your local dealer for details including what fertilizers are compatible.
- As an alternative, atrazine and Bladex at recommended rates may be applied preemergence to the soil surface following a preplant incorporated treatment of SUTAN+ 6.7-E at recommended rates.
- If a preemergence application of atrazine or Bladex is used, consult the application directions on the appropriate label.
- A preemergence application of atrazine or Bladex may require a rotary hoeing or shallow cultivation if rainfall or sprinkler irrigation has not occurred within 10 days of the surface application.
- With the combinations of atrazine and Bladex, the potential hazard of triazine residues affecting certain crops the following year is reduced because a lower rate of triazine can be used.

General Use Precautions For Atrazine, Bladex and Princep/Caliber:

- Follow all the use precautions and warnings that appear on the atrazine, Bladex, and Princep/Caliber labels and supplemental literature.
- Make only one application per crop.
- Do not use on milo and sorghum or Breeders, Foundation, or Increase seed corn stock.

- Bladex is not recommended for use on sandy soils consisting of more than 70% sand and containing less than 1% organic matter. Consult the Bladex label for more specific recommended rates on sandy soils.
- After a treatment including atrazine or Princep/Caliber, do not plant any crop except corn until the following year or injury may occur.
- Consult the atrazine, Bladex, or Princep/Caliber labels and use directions for complete details on any rotation restrictions following their use.
- When Princep/Caliber is used in a tankmix, the soil should be thoroughly tilled after harvest. This fall or spring tillage will help to minimize possible injury to spring seeded rotational crops regardless of the rate of Princep/Caliber used.
- Do not apply any tankmixes with Princep/Caliber in the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required. Included in this are central and western Kansas, western Nebraska, western Oklahoma, and the Panhandle of Texas.
- Injury may occur to soybeans planted in northcentral and northwest Iowa, and southcentral and southwest Minnesota, northeast Nebraska, southeast South Dakota and other areas in the year following applications of Princep/Caliber on soils having a calcareous surface layer.
- Do not plant sugar beets, tobacco, vegetables including dry beans, spring seed small grains or small seeded legumes, and grasses the year after an application of atrazine or Princep/Caliber as injury may occur.

Carriers

- Liquids - The tankmix combinations may be applied using the same liquid carriers as SUTAN+ 6.7-E used alone. If fluid fertilizers are used, a physical compatibility test with these must be done before combining in the spray tank. See Appendix I for details of the compatibility testing procedure. Even if the tankmix is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.
- Dry bulk fertilizer - Tankmixes with atrazine and Bladex combinations may be impregnated on dry bulk fertilizer. Princep/Caliber is not labelled for dry bulk fertilizer impregnation. Follow all directions and precautions listed under SUTAN+ 6.7-E alone on impregnated dry bulk fertilizer (refer to Carriers under Application Directions).

Adding to Spray Tank:

- It is recommended that the compatibility of any tankmix combination be tested on a small scale, such as a jar test, before actual tank mixing. See Appendix I for details on the procedure for such a test.
- Fill a thoroughly rinsed and decontaminated spray tank 2/3 full of clean water.
- Start and continue moderate agitation throughout mixing. Excessive agitations may cause the Bladex, atrazine, or Princep/Caliber to settle out and set up in the spray tank.
- All return lines to the spray tank must discharge below liquid level to prevent foaming.
- Mix and disperse wettable powders first, followed by flowable products and then SUTAN+ 6.7-E.
- For some combinations, premixing wettable powders in a little water in a pail or bucket before adding them to the spray tank will improve the compatibility of the final mixture.
- Premix the Bladex, atrazine, or Princep/Caliber individually in proper order listed above making sure they are thoroughly wetted and dispersed in the tank before adding the SUTAN+ 6.7-E.
- Add the SUTAN+ 6.7-E to the tank that is 2/3 full of water already mixed with the approved tankmix products and continue filling tank.

- The tankmix combinations should not be left in the spray tank for prolonged periods. Batches should be mixed and applied the same day.

Volume and Agitation

- Apply tankmixes of atrazine and/or Bladex in 10 to 50 gallons of water or fluid fertilizers per acre using a properly calibrated sprayer having good agitation.
- Apply tankmixes of Princep/Caliber in 20 to 50 gallons of water or fluid fertilizers per acre using a properly calibrated sprayer having good agitation.
- Use higher gallonage in arid areas.
- All tankmixes require at least 20% bypass agitation at all times.

Pressure and Nozzles:

- Use either flood, fan, or swirl chamber nozzles on a boom type sprayer that have been properly calibrated.
- Check nozzles frequently during application to be sure they are free from clogging and are delivering a uniform spray pattern.
- Tankmixed products require screens to protect the pump and prevent nozzle clogging:
 - Suction side of the pump - 16 mesh or coarser.
 - Recirculation line - no screen needed.
 - Between pump and boom and or nozzles - 50 mesh.

Soil Moisture and Tillth:

- Same as for SUTAN+ 6.7-E alone (refer to Soil Moisture and Tillth under Application Directions).

Incorporation Timing:

- Same as for SUTAN+ 6.7-E alone (refer to Incorporation Timing under Application Directions).

Incorporation Equipment and Methods:

- Same as for SUTAN+ 6.7-E alone except for subsurface injection.
- Do not apply Atrazine, Bladex, or Princep/Caliber through a center pivot sprinkler irrigation system.
- Do not apply any tank mixture through subsurface injection systems.

Planting:

- Same as for SUTAN+ 6.7-E alone (refer to Planting under Application Directions).

Cultivation:

- Same as for SUTAN+ 6.7-E alone (refer to Cultivation under Application Directions).

Sequential Herbicide Applications:

- 2,4-D, Banvel® herbicide
A sequential treatment with 2,4-D or Banvel is recommended for escapes of broadleaves.
- Use 2,4-D and Banvel at recommended rates found on the manufacturer's label.

Weeds Controlled and Use Rates:

- Consult Tables 3 and 4.
- NOTE COMMENTS AND RESTRICTIONS IN TABLE 3.

**TANKMIX COMBINATIONS WITH SUTAN+ 6.7-E
ADDITIONAL WEEDS CONTROLLED**

TABLE 3

ADDITIONAL WEEDS CONTROLLED WITH TANKMIXES	SCIENTIFIC NAME	SUTAN+ 6.7-E TANK MIXED WITH				CONTROLLED BY
		ATRAZINE	BLADEX	ATRAZINE & BLADEX	PRINCEP & CALIBER	
Bluegrass, annual	<i>Poa annua</i>	-	C	C	-	FAL
Brome, downy	<i>Bromus tectorum</i>	-	-	-	-	• Fa
Buckwheat, wild	<i>Polygonum convolvulus</i>	-	C	C	-	wi
Buffalobur	<i>Solanum rostratum</i>	-	C	C	-	co
Bullgrass	<i>Paspalum boscianum</i>	-	C	C	-	BL
Burdocks:	<i>Medicago</i> spp.	-	-	-	-	• Fa
Buttercup, annual	<i>Ranunculus</i> spp.	-	C	C	-	M
Carpetweed	<i>Mollugo verticillata</i>	-	C	C	-	es
Chickweed, common	<i>Stellaria media</i>	-	C	C	-	es
Cocklebur, common	<i>Xanthium pensylvanicum</i>	C	C	C	-	W
Com spurry	<i>Spergula arvensis</i>	-	C	C	-	l-6
Curly dock, seedling	<i>Rumex crispus</i>	-	C	C	-	• Ap
Fiddleneck	<i>Amsinckia</i> spp.	-	-	-	-	of
Fescues, annual	<i>Festuca</i> spp.	-	C	C	-	of
Flora's paintbrush	<i>Emilia sagittata</i>	-	C	C	-	co
Florida pusley	<i>Richardia scabra</i>	-	C	C	C	• Th
Groundcherry, annual	<i>Physalis lanceifolia</i>	-	C	C	-	be
Groundsel, common	<i>Senecio vulgaris</i>	-	-	C	-	• Im
Henbit	<i>Lamium amplexicaule</i>	-	-	-	-	m
Indian lovegrass	<i>Eragrostis pilosa</i>	-	C	C	-	• D
Jimsonweed	<i>Datura stramonium</i>	C	C	C	-	su
Junglerice	<i>Echinochloa colonum</i>	-	C	C	-	• D
Knotweed, prostrate	<i>Polygonum aviculare</i>	-	C	C	-	su
Kochia	<i>Kochia scoparia</i>	-	C	C	-	• D
Lodosthumb	<i>Polygonum persicaria</i>	-	C	C	-	BLA
Lamb's quarters, common	<i>Chenopodium album</i>	C	C	C	C	• U
Lettuce, prickly	<i>Lactuca serriola</i>	-	-	-	-	w
Mallow, common	<i>Mehria neglecta</i>	-	C	C	-	M
Maryweed	<i>Anthemis cotula</i>	-	C	C	-	
Morning glory, annual	<i>Ipomoea purpurea</i>	-	C	C	-	

ADDITIONAL WEEDS CONTROLLED WITH TANKMIXES	SCIENTIFIC NAME	SUTAN+ 6.7-E TANK MIXED WITH				COMMENTS AND RESTRICTIONS
		ATRAZINE	BLADEX	ATRAZINE & BLADEX	PRINCEP & CALIBER	
Mustard, black Mustard, hedge Mustard, Wild	<i>Brassica nigra</i> <i>Sisymbrium officinale</i> <i>Brassica kaber</i>	C . C	C C C	C C C	- - -	PRINCEP/CALIBER • Use the higher rate of Princep or Caliber on fine textured soils. • Use the higher rate of Princep or Caliber where heavy broadleaf weed infestations are expected.
Nightshade Oats, wild Pepperweed Pepperweed, yellowflower Pigweed, prostrate	<i>Solanum</i> spp. <i>Avena fatua</i> <i>Lepidium</i> spp. <i>Lepidium perfoliatum</i> <i>Amaranthus blitoides</i>	C C . . C	. C . . .	C C	
Pigweed, redroot Pigweed, smooth Pineappleweed Plantain Poorjoe	<i>Amaranthus retroflexus</i> <i>Amaranthus hybridus</i> <i>Matricaria matricarioides</i> <i>Plantago</i> spp. <i>Diodia teres</i>	C C . . .	C C C C C	C C C C C	C	
Prickly sida Purslane, common Radish, Wild Ragweed Russian thistle	<i>Sida spinosa</i> <i>Portulaca oleracea</i> <i>Raphanus raphanistrum</i> <i>Ambrosia</i> spp. <i>Salsola kali</i>	. C . C .	C C C C .	C C C C C .	
Ryegrass, annual Shepherd's-purse Sicklepod Signalgrass, broadleaf Smallflower galinsoga	<i>Lolium multiflorum</i> <i>Capsella bursa-pastoris</i> <i>Cassia obtusifolia</i> <i>Bracharia platyphylla</i> <i>Galinsoga parviflora</i>	. . C C .	C C C . C	C C . . C	
Smartweed, pennsylvania Spotted tail Spurge, prostrate Stinkgrass Sunflower, common	<i>Polygonum pennsylvanicum</i> <i>Veronica</i> spp. <i>Euphorbia supina</i> <i>Ergroetia cilianensis</i> <i>Helianthus annuus</i>	C	C . C C .	C . C C	

16837

ADDITIONAL WEEDS CONTROLLED WITH TANKMIXES	SCIENTIFIC NAME	SUTAN+ 6.7-E TANK MIXED WITH				COMMENTS AND RESTRICTIONS
		ATRAZINE	BLADEX	ATRAZINE & BLADEX	PRINCEP & CALIBER	
Tansymustard Tarweed Turnip, wild Velvetleaf Witchgrass	<i>Descurainia pinnata</i> <i>Henizonia congesta</i> <i>Brassica carpestris</i> <i>Abutilon theophrasti</i> <i>Panicum capillare</i>	- - - C C	- C C C C	- C C C C	- - - - -	
Nutsedge, purple Nutsedge, yellow Texas Panicum* *Southwest only	<i>Cyperus rotundus</i> <i>Cyperus esculentus</i> <i>Panicum texanum</i>	C C C	C C C	C C C	C C C	<ul style="list-style-type: none"> • Use 4 3/4 to 7 1/3 pints of SUTAN+ 6.7-E. • Use the higher rate for medium and fine textured soils and heavy infestations. • Existing stands of nutsedge must be turned under and chopped up thoroughly before application. • Cultivation is recommended.
Shattercane (Suppression only)	<i>Sorghum vulgare</i>	S	S	S	S	<ul style="list-style-type: none"> • Use 7 1/3 pints of SUTAN+ 6.7-E. • Apply and incorporate the tankmix combination immediately before planting for suppression and reduced competition. • On corn acreage with high shattercane seed populations, rotate to another crop such as soybeans to control the population in alternate years. • See Table 2 under Shattercane for supplemental cultural and tillage practices.

17437

ADDITIONAL WEEDS CONTROLLED WITH TANKMIXES	SCIENTIFIC NAME	SUTAN+ 6.7-E TANK MIXED WITH				COMMENTS AND RESTRICTIONS
		ATRAZINE	BLADEX	ATRAZINE & BLADEX	PRINCEP & CALIBER	
Bermudagrass, rhizome Bermudagrass, seedling Johnsongrass, rhizome Johnsongrass, seedling	<i>Cynodon dactylon</i> <i>Cynodon dactylon</i> <i>Sorghum halepense</i> <i>Sorghum halepense</i>	C C S C	C C S C	C C S C	C C S C	<ul style="list-style-type: none"> • Use 4 3/4 to 7 1/3 pints of SUTAN+ 6.7-E. • Use the higher rate for medium and fine textured soil and for heavy infestations. • Apply and use a disc to incorporate immediately before planting. • Disc a second time at right angles to the first pass. • See page 5, Table 2 for supplemental cultural and tillage practices under rhizome bermudagrass and rhizome johnsongrass.
Hemp dogbane	<i>Apocynum cannabinum</i>	S	S	-	-	<ul style="list-style-type: none"> • For early and midseason suppression apply 7 1/3 pints of SUTAN+ 6.7-E. • Use 1 1/4 pounds of Atrazine 80W or 2 to 3 pints of Atrazine 4L or 1 to 1 3/4 pounds of AAtrex® Nine-O® Herbicide. • Cultivation or application of a postemergence herbicide recommended for hemp dogbane may aid in extending control beyond midseason.

C = Control, S = Suppression or reduced competition

18 of 31

BLADEX 80W BLADEX 4L	2 to 2 1/2 LBS 3 to 4 PINTS
ATRAZINE 80W + BLADEX 80W ATRAZINE 80W + BLADEX 4L ATRAZINE 4L + BLADEX 80W ATRAZINE 4L + BLADEX 4L	3/4 to 1 1/4 + 1 1/4 to 2 1/2 LBS 3/4 to 1 1/4 LBS + 2 to 4 PINTS 1 to 2 PINTS + 1 1/4 to 2 1/2 LBS 1 to 2 + 2 to 4 PINTS
PRINCEP 4L PRINCEP 80W PRINCEP CALIBER 90	2 to 6 PINTS 1 1/4 to 3 3/4 LBS 1 1/10 to 3 1/3 LBS

APPENDIX I

Procedure for Testing the Compatibility of SUTAN+ 6.7-E alone or with Tankmix Combinations with Fluid Fertilizers.

The following procedure is suggested for determining whether or not SUTAN+ 6.7-E may be combined with a specific fluid fertilizer or tankmix herbicide for spray tank application.

Materials Required:

1. SUTAN+ 6.7-E
2. Fluid fertilizer and tankmix herbicides
3. Adjuvant for spray tankmix combinations: Compex™, Sponto™ 168-D, Unite™, or equivalent. The adjuvant which provides the best emulsification depends on the specific fertilizer and herbicide under consideration.
4. Two one-quart, wide mouth glass jars with lid or stopper.
5. Measuring spoons. A 25 mL pipette or graduated cylinder provides more accurate measurement. 1 tablespoon equals 3 teaspoons equals approximately 5 milliliters.
6. Measuring cup, 8 ounces (257 mL).

Procedure:

- Pour a pint or about 473 mL of the fluid fertilizer or water into each of the quart jars.
- Add adjuvant to one of the jars and mix. See Table 6 footnote for rate.
- If a tankmix is being tested, premix the wetttable powders in 1/8 cup of water prior to addition to the pint of fluid fertilizer or water. See Table 4 for rates of tankmix products.
- The order of addition is wetttable powders first, followed by flowables and SUTAN+ 6.7-E last.
- Add SUTAN+ 6.7-E to both jars. See Table 6 for rate to use.
- Close both jars with lid or stopper and mix the contents by turning the jars upside down ten times.
- Inspect the surface and body of the mixtures:
 - Immediately after completing the jar inversions.
 - After allowing the jars to stand quietly for 30 minutes.
 - And then again after turning the jars upside down 10 times after the 30 minute wait.

Evaluation:

- If a uniform mixture cannot be made, the mixture should not be used.
- If either mixture remains uniform for 30 minutes, the combination may be used.
- Should either mixture separate after 30 minutes, but readily remixes uniformly with ten jar inversions, the mixture can be used if adequate agitation is maintained in the tank.
- If the mixture with adjuvant is satisfactory, but the one without adjuvant is not, be sure to use the adjuvant in the spray tank.
- If adjuvant is needed, add it first at a rate of 3 pints per 100 gallons of fluid fertilizer or water.
- Foaming can be minimized by using moderate agitation.
- If nondispersible oil, sludge, or clumps of solids form in the mixture, the combination should not be used.
 - If adjuvant is needed, add it first at a rate of 3 pints per 100 gallons of fluid fertilizer or water.
 - Foaming can be minimized by using moderate agitation.
 - If nondispersible oil, sludge, or clumps of solids form in the mixture, the combination should not be used.

21437

**SUTAN+ 6.7-E
 CONVERSION CHART**

TABLE 5

SUTAN+ 6.7-E PINTS PER ACRE	APPROXIMATE POUNDS OF ACTIVE PER ACRE
3 3/4	3.00
4 3/4	4.00
6	5.00
7 1/3	6.00

**RATE TABLE FOR SUTAN+ 6.7-E and
 ADJUVANT* WITH THE FLUID FERTILIZER**

TABLE 6

GALLONS OF FLUID FERTILIZER TO BE APPLIED PER ACRE	SUTAN + 6.7-E TO BE ADDED TO 1 PINT OF FERTILIZER PER POUND OF ACTIVE	
	mL	tsp.
10	7	1 1/3
15	5	1
20	4	3/4
25	3	2/3
30	2	1/2
40	2	1/2

- * Two (2) milliliters of one-half (1/2) teaspoon of adjuvant should be added to 1 pint of fluid fertilizer in order to equal the rate of 3 pints of adjuvant per 100 gallons of fluid fertilizer.

APPENDIX II

Impregnation on Dry Bulk Fertilizers

- Consult your local dealer for more details.
- SUTAN+ 6.7-E alone and tankmix combinations with atrazine and/or Bladex may be impregnated on dry bulk fertilizer.
- **CAUTION:** SUTAN+ 6.7-E alone and in combination tankmixes must not be impregnated on ammonium nitrate, potassium nitrate, or sodium nitrate fertilizers. Such mixtures may cause explosion and fire.
- All individual state regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling the herbicide and fertilizer mixtures.
- Approved Dry Bulk Fertilizer Ingredients for Use with SUTAN+ 6.7-E alone (Table 7).

IMPREGNATION ON DRY BULK FERTILIZERS

TABLE 7

FERTILIZER INGREDIENT	N	P	K
Ammonium sulfate	21	0	0
Ammonium phosphate-sulfate	16	20	0
Diammonium phosphate	18	46	0
Monoammonium phosphate	11	56	0
Potassium chloride	0	0	60
Potassium sulfate	0	0	52
Single Super-phosphate	0	20	0
Treble Super-phosphate	0	46	0
Urea*	45	0	0
K-Mag/Sul-Po-Mag	0	0	21

* Some ureas may be phytotoxic when high rates are applied to corn. Use only urea rates known to be safe for corn application.

23 of 37

- Approved Dry Bulk Fertilizer Ingredients for use with SUTAN+ 6.7-E in tankmix conditions with atrazine and/or Bladex (Table 8).

IMPREGNATION ON DRY BULK FERTILIZERS

TABLE 8

FERTILIZER INGREDIENT	N	P	K
Ammonium sulfate	21	0	0
Ammonium phosphate-sulfate	16	20	0
Diammonium phosphate	18	46	0
Monoammonium phosphate	11	48	0
Potassium chloride	0	0	60
Potassium sulfate	0	0	52
Urea*	45	0	0
K-Mag/Sul-Po-Mag	0	0	21

- Some ureas may be phytotoxic when high rates are applied to corn. Use only urea rates known to be safe for corn application.

Impregnation on Dry Bulk Fertilizers

- Uniform impregnation of the SUTAN+ 6.7-E on dry bulk fertilizer particles and uniform application in the field are necessary to assure good results.
- A minimum of 200 and a maximum of 700 pounds of approved fertilizers from Tables 6 and 7 must be applied per acre. See Tables 9 through 12 for the rates of herbicide to be applied per ton of fertilizer based on herbicide use rate.
- Use a closed rotary drum mixer or similar type of closed blender equipped with suitable spray equipment.
- The spray nozzle should be positioned inside of the mixer to provide uniform spray coverage of the tumbling fertilizer and provide a uniform fine spray pattern.
- Tankmix combinations may be added separately or mixed in the proposed use ratio in a uniform slurry for joint spray impregnation.
- Physical properties of fertilizers vary in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with the herbicides provides a satisfactory, dry mixture.
- Drying agent for spinning-disc applicators is:
 - Micro-Cel™ E calcium silicate powder - Manville Sales Corporation.
- Drying agents for pneumatic applicators are:
 - Micro-Cel E calcium silicate powder - Manville Sales Corporation.
 - Agsorb™ 16/30 RVM-MS granular clay - Oil Dri Corporation
- Drying agents should be added separately and uniformly to the previously impregnated herbicide-fertilizer or soil herbicide mixture to insure that the mixture is free flowing. Generally the following amounts are sufficient:
 - Micro-Cel E Calcium Silicate powder less than 2% by weight
 - Agsorb 16/30 RVM-MS granular clay less than 5% by weight
- The amount of SUTAN+ 6.7-E, atrazine and/or Bladex actually required in the manufacture of individual fertilizer mixtures should be determined carefully for each production operation.

24 of 37

This is necessary to ensure that the amount of herbicide actually contained in the mixture applied to the soil represents the correct use rate.

Physical Data

- Specific gravity 68°F/20°C: 0.946 (typical)
- Pounds/Gallon 68°F/20°C: 7.87 (typical)
- Flashpoint: 197°F (Tagliabue closed cup)
- Viscosity: Sprayable down to minus 20°F/-29°C

**RATE CHART OF IMPREGNATION OF DRY BULK FERTILIZER WITH SUTAN+ 6.7-E
AND ATRAZINE OR BLADEX PER TON OF FERTILIZER**

TABLE 9

FERTILIZER RATE POUNDS PER ACRE	SUTAN+ 6.7-E			BLADEX ALONE IN		
	PINTS PER ACRE			4L PINTS PER ACRE		ROW
	3 3/4	4 3/4	7 1/3	3	4	
200	18 3/4 qts	23 3/4 qts	36 2/3 qts	15 qts	20 qts	2
250	15 qts	19 qts	29 1/3 qts	12 qts	16 qts	1
300	12 1/2 qts	15 4/5 qts	24 2/5 qts	10 qts	13 1/2 qts	13
350	10 3/4 qts	13 3/5 qts	21 qts	8 3/5 qts	11 1/2 qts	11
400	9 2/5 qts	11 7/8 qts	18 1/3 qts	7 1/2 qts	10 qts	1
450	8 1/3 qts	10 1/2 qts	16 1/3 qts	6 2/3 qts	9 qts	87
500	7 1/2 qts	9 1/2 qts	14 2/3 qts	6 qts	8 qts	8
550	6 4/5 qts	8 2/3 qts	13 1/3 qts	5 1/2 qts	7 1/4 qts	71
600	6 1/4 qts	8 qts	12 1/5 qts	5 qts	6 2/3 qts	62
650	5 3/4 qts	7 1/3 qts	11 1/4 qts	4 3/5 qts	6 1/4 qts	61
700	5 1/3 qts	6 4/5 qts	10 1/2 qts	4 1/4 qts	5 3/4 qts	53

RATE OF IMPREGNATION OF DRY BULK FERTILIZER WITH SUTAN+ 6.7-E
 AND ATRAZINE OR BLADEx PER TON OF FERTILIZER

TABLE 10

FERTILIZER RATE POUNDS PER ACRE	SUTAN+ 6.7-E			ATRAZINE ALONE IN TANKMIX			
	PINTS PER ACRE			4L PINTS PER ACRE		80W POUNDS PER ACRE	
	3 3/4	4 3/4	7 1/3	2	3	1 1/4	2
200	18 3/4 qts	23 3/4 qts	36 2/3 qts	10 qts	15 qts	12 1/2 lbs	20 lbs
250	15 qts	19 qts	29 1/3 qts	8 qts	12 qts	10 lbs	16 lbs
300	12 1/2 qts	15 4/5 qts	24 2/5 qts	6 2/3 qts	10 qts	8 1/3 lbs	13 1/3 lbs
350	10 3/4 qts	13 3/5 qts	21 qts	5 3/4 qts	8 3/5 qts	7 1/5 lbs	11 2/5 lbs
400	9 2/5 qts	11 7/8 qts	18 1/3 qts	5 qts	7 1/2 qts	6 1/4 lbs	10 lbs
450	8 1/3 qts	10 1/2 qts	16 1/3 qts	4 1/2 qts	6 2/3 qts	5 2/3 lbs	8 7/8 lbs
500	7 1/2 qts	9 1/2 qts	14 2/3 qts	4 qts	6 qts	5 lbs	8 lbs
550	6 4/5 qts	8 2/3 qts	13 1/3 qts	3 2/3 qts	5 1/2 qts	4 2/3 lbs	7 1/4 lbs
600	6 1/4 qts	8 qts	12 1/5 qts	3 1/3 qts	5 qts	4 1/5 lbs	6 2/3 lbs
650	5 3/4 qts	7 1/3 qts	11 1/4 qts	3 1/5 qts	4 3/5 qts	3 7/8 lbs	6 1/5 lbs
700	5 1/3 qts	6 4/5 qts	10 1/2 qts	2 7/8 qts	4 1/4 qts	3 2/3 lbs	5 3/4 lbs

26.837

SUTAN+ 6.7-E Booklet
 STAN222B.RSA - RS-071293A

RATE CHART OF IMPREGNATION OF DRY BULK FERTILIZER WITH SUTAN+ 6.7-E
 AND ATRAZINE PLUS BLADEX PER TON OF FERTILIZER

TABLE 11

FERTILIZER RATE POUNDS PER ACRE	SUTAN+ 6.7-E			BLADEX RATE FOR A 3-WAY MIX			
	PINTS PER ACRE			4L PINTS PER ACRE		80W POUNDS PER ACRE	
	3 3/4	4 3/4	7 1/3	2	4	1 1/4	2 1/2
200	18 3/4 qts	23 3/4 qts	36 2/3 qts	10 qts	20 qts	12 1/2 lbs	25 lbs
250	15 qts	19 qts	29 1/3 qts	8 qts	16 qts	10 lbs	20 lbs
300	12 1/2 qts	15 4/5 qts	24 2/5 qts	6 3/5 qts	13 1/2 qts	8 1/3 lbs	16 2/3 lbs
350	10 3/4 qts	13 3/5 qts	21 qts	5 4/5 qts	11 1/2 qts	7 1/8 lbs	14 1/3 lbs
400	9 2/5 qts	11 7/8 qts	18 1/3 qts	5 qts	10 qts	6 1/4 lbs	12 1/2 lbs
450	8 1/3 qts	10 1/2 qts	16 1/3 qts	4 2/5 qts	9 qts	5 1/2 lbs	11 1/5 lbs
500	7 1/2 qts	9 1/2 qts	14 2/3 qts	4 qts	8 qts	5 lbs	10 lbs
550	6 4/5 qts	8 2/3 qts	13 1/3 qts	3 2/3 qts	7 1/4 qts	4 2/3 lbs	9 1/5 lbs
600	6 1/4 qts	8 qts	12 1/5 qts	3 1/3 qts	6 2/3 qts	4 1/5 lbs	8 1/3 lbs
650	5 3/4 qts	7 1/3 qts	11 1/4 qts	3 1/8 qts	6 1/4 qts	3 7/8 lbs	7 2/3 lbs
700	5 1/3 qts	6 4/5 qts	10 1/2 qts	2 7/8 qts	5 3/4 qts	3 2/3 lbs	7 1/5 lbs

27437

**RATE CHART OF IMPREGNATION OF DRY BULK FERTILIZER WITH SUTAN+ 6.7-E
 AND ATRAZINE PLUS BLADEx PER TON OF FERTILIZER**

TABLE 12

FERTILIZER RATE POUNDS PER ACRE	SUTAN+ 6.7-E			ATRAZINE RATE FOR A 3-WAY TANKMIX			
	PINTS PER ACRE			4L PINTS PER ACRE		50W POUNDS PER ACRE	
	3 3/4	4 3/4	7 1/3	1	2	3/4	1 1/4
200	18 3/4 qts	23 3/4 qts	36 2/3 qts	5 qts	10 qts	7 1/2 lbs	12 1/2 lbs
250	15 qts	19 qts	29 1/3 qts	4 qts	8 qts	6 lbs	10 lbs
300	12 1/2 qts	15 4/5 qts	24 2/5 qts	3 1/3 qts	6 2/3 qts	5 lbs	8 1/3 lbs
350	10 3/4 qts	13 3/5 qts	21 qts	2 7/8 qts	5 3/4 qts	4 1/3 lbs	7 1/5 lbs
400	9 2/5 qts	11 7/8 qts	18 1/3 qts	2 1/2 qts	5 qts	3 3/4 lbs	6 1/4 lbs
450	8 1/3 qts	10 1/2 qts	16 1/3 qts	2 1/4 qts	4 1/2 qts	3 1/3 lbs	5 2/3 lbs
500	7 1/2 qts	9 1/2 qts	14 2/3 qts	2 qts	4 qts	3 lbs	5 lbs
550	6 4/5 qts	8 2/3 qts	13 1/3 qts	1 7/8 qts	3 2/3 qts	2 3/4 lbs	4 2/3 lbs
600	6 1/4 qts	8 qts	12 1/5 qts	1 2/3 qts	3 1/3 qts	2 1/2 lbs	4 1/5 lbs
650	5 3/4 qts	7 1/3 qts	11 1/4 qts	1 3/5 qts	3 1/5 qts	2 1/3 lbs	3 7/8 lbs
700	5 1/3 qts	6 4/5 qts	10 1/2 qts	1 1/2 qts	2 7/8 qts	2 1/5 lbs	3 2/3 lbs

28737

PESTICIDE DISPOSAL: Rinse spray equipment. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Metal: Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Plastic: Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

FOR BULK AND MINI-BULK CONTAINERS

CONTAINER DISPOSAL: Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

CONTAINER PRECAUTIONS

Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

REFILL ONLY WITH SUTAN+ 6.7-E. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than SUTAN 6.7-E will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

CONDITIONS OF SALE AND LIMITED WARRANTY:

The Directions for Use of this product are believed to be reliable and should be followed carefully. However, 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 timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.

When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified: Country: United States of America.

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Aatrex®, Caliber®, Nine-O®, and Princep® are trademarks of CIBA-GEIGY Corporation.
Bladex® is a trademark of E. I. duPont de Nemours & Co. (Inc.).
Agsorb™ is a trademark of Oil Dri Corporation of America.
Banvel® is a trademark of Sandoz Crop Protection Corporation.
Compex™ is a trademark of Kalo, Inc.
Micro-Cel™ is a trademark of Manville Sales Corporation.
Sponto™ is a trademark of Witco Corporation.
Unite™ is a trademark of HACO, Inc.

SUTAN+® 6.7-E
Selective Herbicide

A Selective Emulsifiable Preplant Incorporated Liquid
Herbicide for Annual Grass Control in Field, Sweet, Pop, and Silage Corn

ACTIVE INGREDIENT:		
S-Ethyl diisobutylthiocarbamate		85.1%
INERT INGREDIENTS:		14.9%
Total		100.0%

Contains 6.7 pounds of active ingredient per gallon

EPA Reg. No. 10182-222
EPA Est. No. 10182-

Net Contents:

KEEP OUT OF REACH OF CHILDREN

CAUTION

ACCEPTED
with **COMMENTS**
in EPA Letter Dated:

Under the Federal Insecticide, Fungicide, and Rodenticide Act
Registration No. 10182-222

Made in U.S.A.
ZENECA Ag Products
ZENECA Inc.
Wilmington, DE 19897

STATEMENT OF PRACTICAL TREATMENT

FIRST AID

If a known exposure occurs or is suspected, immediately initiate the recommended procedures below. If further treatment is required, contact a Poison Control Center, a physician, or the nearest hospital.

IF SWALLOWED: Immediately give several glasses of water but **DO NOT** induce vomiting. If vomiting does occur, give fluids again. Have a physician determine if condition of patient will permit evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

IF IN EYES: Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart during flushing to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

IF ON SKIN: Immediately flush all affected areas with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention if skin irritation occurs. Wash clothing before reuse.

IF INHALED: Remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

33 of 37

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

HARMFUL IF SWALLOWED. Avoid contact with skin, eyes, and clothing. Avoid breathing spray mist. Wear goggles, rubber gloves, and protective clothing. Wash skin with soap and water immediately after contact. Flush eyes with water.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. When applied through sprinkler irrigation method of application, the area being treated must be vacated by unprotected persons.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Cover or incorporate spills.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Refer to attached booklet for use directions.

GENERAL INFORMATION

SUTAN+® 6.7-E selective herbicide is mixed (incorporated) or injected into the soil for control or suppression of weeds listed in Tables 1 and 2 of this label. SUTAN+ 6.7-E controls annual grasses as their seeds germinate by interfering with normal germination and seedling development. It does not control established weeds.

GENERAL USE PRECAUTIONS

- Read all label directions before using.
- SUTAN+ 6.7-E can be stored at temperatures as low as minus 50°F.
- SUTAN+ 6.7-E is recommended for use only on mineral soils or those soils containing less than 10% organic matter.
- SUTAN+ 6.7-E should not be used on milo or sorghum.
- SUTAN+ 6.7-E should not be used on corn seed stock such as Breeders, Foundation, or Increase.
- SUTAN+ 6.7-E can be used on production seed corn.
- Do not contaminate irrigation water used for crops other than corn or water used for domestic purposes.
- Do not apply SUTAN+ 6.7-E before preirrigation in irrigated areas.
- Do not allow SUTAN+ 6.7-E to contaminate feed or food.
- SUTAN+ 6.7-E should not be stored near seeds, fertilizers, or foodstuffs.
- All containers of SUTAN+ 6.7-E should be kept tightly closed when not in use.
- Do not use in Arizona except on field and silage corn at elevations of 2500 feet or higher.
- Do not use in the ten southernmost California counties except Kern. In Kern county SUTAN+ 6.7-E may only be used on field and silage corn.
- Applied according to directions and under normal growing conditions, SUTAN+ 6.7-E will not harm the treated crop. During germination and early stages of growth, extended periods of unusually cold and wet or hot and dry weather, insect or plant disease attack, carryover pesticide residues, the use of certain soil-applied systemic insecticides, improperly placed fertilizers or soil insecticides may create abnormal conditions that

weaken seedlings. SUTAN+ 6.7-E used under these abnormal conditions could result in crop injury.

- When applied according to directions and when conditions exist for normal plant growth through the season, no harmful residues of SUTAN+ 6.7-E should remain beyond harvest. In the Southeastern U.S., when SUTAN+ 6.7-E is used for weed control in silage corn, do not plant small seeded grains until September following corn harvest.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

STORAGE: Keep container tightly closed when not in use. Do not store near seeds, fertilizers, or foodstuffs. Store out of reach of children, pets and domestic animals. Can be stored at temperatures as low as minus 50°F.

PESTICIDE DISPOSAL: Rinse spray equipment. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Metal: Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Plastic: Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

FOR BULK AND MINI-BULK CONTAINERS

CONTAINER DISPOSAL: Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

CONTAINER PRECAUTIONS

Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

REFILL ONLY WITH SUTAN+ 6.7-E. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than SUTAN 6.7-E will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

CONDITIONS OF SALE AND LIMITED WARRANTY:

The Directions for Use of this product are believed to be reliable and should be followed carefully. However, 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 timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.

When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified: Country: United States of America.

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Banvel® is a trademark of Sandoz Crop Protection Corporation.
Compex™ is a trademark of Kalo, Inc.
Micro-Cel™ is a trademark of Manville Sales Corporation.
Sponto™ is a trademark of Witco Corporation.
Unite™ is a trademark of HACO, Inc.

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- When applied according to directions and when conditions exist for normal plant growth through the season, no harmful residues of SUTAN+ 6.7-E should remain beyond harvest. In the Southeastern U.S., when SUTAN+ 6.7-E is used for weed control in silage corn, do not plant small seeded grains until September following corn harvest.

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Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.

Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories). Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. THE EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in your country except as specified. Country: United States of America.

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393 ZENECA Inc.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

FEB 23 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

10187-222

ZENECA Ag Products

ZENECA Inc.
Wilmington, Delaware 19897

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BEST AVAILABLE