PM 25 352-501

RESTRICTED USE PESTICIDE 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. See Precautionary Statements for reasons this product is classified Restricted Use.

REGISTRATION CODE 0569-001

PACKAGE SIZE
25 POUND BAG

EXTRAZINE® 90DF

Herbicide

EXTRAZINE 90DF is a water dispersible granule.

DISPERSIBLE GRANULE

ACTIVE INGREDIENTS	BY WEIGHT
Cyanazine: 2-[[4-chloro-6-(ethylamino)-s-triazin- 2-yl]amino]-2-methylpropionitrile	60.0%
Atrazine (2-chloro-4-ethylamino-6-isopropylamino-s-triazine)	28.5%
Related compounds	1.5%
INERT INGREDIENTS	10.0%
TOTAL	100.0%

This product contains 90 percent by weight active ingredients.

EPA Reg. No. 352-501

13-0

KEEP OUT OF REACH OF CHILDREN

WARNING

AVISO PRECAUCION AL USUARIO: *Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicada ampliamente.*

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED, call a physician or poison control center. Drink one or two 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 with plenty of soap and water.
IF INHALED, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.
For medical emergencies involving this product, call 1-800-441-3637.

PRECAUTIONARY STATEMENTS
HAZARD TO HUMANS AND DOMESTIC ANIMALS

WARNING: May be fatal if swallowed. Harmful if inhaled or absorbed through the skin. Causes temporary eye injury.
This product may be hazardous to your health. This product 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. Wear a face shield when mixing and loading. Wash thoroughly with soap and water after handling and before eating or smoking.

Wear long trousers and long-sleeved clothing when applying this product. Wear chemical resistant gloves extending above the wrist, a chemical resistant apron, long trousers, and long-sleeved clothing when mixing or loading or when adjusting, repairing or cleaning equipment. Protective gloves must be washed with soap and water after use and before removing from the hands. Remove contaminated clothing and wash before reuse. Contaminated clothing should be laundered separately from household laundry to prevent cross-contamination of other laundry. Heavily contaminated or drenched clothing and protective equipment must be discarded or destroyed in accordance with State and local regulations.

Do not apply this product in such a manner as to directly, or through drift, expose workers or other persons. The area being treated must be vacated by unprotected persons.

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.

ENVIRONMENTAL HAZARDS

Cyanazine and Atrazine, the active ingredients of EXTRAZINE 90DF, are pesticides which can move (seep or travel) through soil and can contaminate groundwater which may be used as drinking water. Cyanazine and Atrazine have been found in groundwater as a result of agricultural use. Users are advised not to apply EXTRAZINE 90DF 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.

Atrazine is toxic to aquatic invertebrates. Do not apply directly to water or wetlands. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

In case of significant spill, call CHEMTREC 1-800-424-9300.

NOTIFICATION
LABEL NOT REVIEWED
PER PR NOTICE 86-5

DATE APR 8 1990

DIRECTIONS FOR USE

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

GENERAL USE INFORMATION

EXTRAZINE 90DF Herbicide is a selective herbicide for the control of annual grasses and broadleaf weeds in field corn, popcorn, sweet corn, fallow cropland and grain sorghum.

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

Where surfactants or emulsible vegetable oils are added to EXTRAZINE 90DF 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.

Weather Effects: As a preemergence herbicide, EXTRAZINE 90DF 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 for those applications which are not incorporated at the time of treatment, if adequate rainfall or sprinkler irrigation has not occurred within ten to twelve days after application of EXTRAZINE 90DF.

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, disease, 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 EXTRAZINE.

When applied as a postemergence herbicide, EXTRAZINE 90DF is 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 EXTRAZINE postemergence to a crop that is damaged or growing under stress.

EXTRAZINE 90DF is not effective when used preemergence on peat or muck soils. Do not use EXTRAZINE 90DF on sands or loamy sands (soils consisting of more than 70% sand) containing less than 1% organic matter. OBSERVE ALL CAUTIONS AND LIMITATIONS ON LABELING OF ALL PRODUCTS USED IN MIXTURES.

Rotational Crops: (1) Plant only corn, peanuts, sorghum, or soybeans the year following the use of this herbicide. (2) If soybeans are to be planted, injury 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 product 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.

Triazine Resistant Weeds: In fields where triazine resistant biotypes of weeds have been identified, EXTRAZINE 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 DIRECTIONS

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

Use sufficient agitation to ensure that the EXTRAZINE 90DF is completely dispersed and in uniform suspension prior to application or tank mixing with other formulations.

The following general mixing instructions are recommended:

L General

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 requirements 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 carriers or other formulations. A simple but generally reliable TMC evaluation procedure has been provided for your use in Step II of these mixing instructions.
4. Start with thoroughly clean equipment. (See the labels of the previous compounds for cleaning instructions.)
5. Fill the tank at least 1/2 full with carrier. Start and maintain consistent agitation through all mixing and spraying procedures. Make sure the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
6. Add the recommended amount of EXTRAZINE 90DF to the tank.
7. Fill the 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, ensure that sufficient agitation has been provided to re-mix all products and check for complete re-suspension 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 emulsifiable 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 emulsifiable oil, oil concentrate, or other emulsible formulation has been used either alone or in tank mix combinations with other pesticide formulations. This precaution will ensure a clean sprayer and continued trouble-free operation.

II. Tank Mix Compatibility Evaluation Procedure

1. Add 1 pint of carrier liquid to each of 2 one-quart jars. Mark 1 quart jar "with" and the other "without."
2. Add 1/4 teaspoon of a suitable compatibility agent (1/4 teaspoon/pint = 2 pints/100 gallons of carrier) to the jar marked "with", cap the jar and shake gently for 5 to 10 seconds to mix. 3. Add the appropriate amount of herbicide to both jars, cap each jar and shake gently for 5 to 10 seconds to mix. If problems are encountered in mixing wettable powder or dry flowable formulations into a liquid fertilizer, pre-slurry 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 in selecting the approximate EXTRAZINE 90DF use rate for this evaluation.

JAR TEST FOR EXTRAZINE 90DF COMPATIBILITY						
Gallons of Liquid Carrier per acre	4	7.5	15	20	25	30
Teaspoons of EXTRAZINE 90DF per pint of Liquid Carrier	6.0	3.2	1.6	1.2	1.0	0.8

This chart is based on 1 pound of EXTRAZINE 90DF (0.9 pound active ingredient) per acre in the indicated carrier volumes. Intended field use rates are achieved by varying the amount of EXTRAZINE 90DF, e.g., for a field use rate of 3 pounds of EXTRAZINE 90DF in 15 gallons of carrier per acre, add 4.8 level teaspoons of EXTRAZINE 90DF to the quart jars containing 1 pint of carrier. Calculation: 3 pounds of EXTRAZINE 90DF/15 gallons of carrier per acre = 3 X 1.6 = 4.8 teaspoons of EXTRAZINE 90DF 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, the herbicides can, in most cases, be safely used in that carrier without a compatibility agent.
6. If problem 4.a or 4.b occurs in the jar marked "without" but does not occur in the jar marked "with", the compatibility agent should be used.
7. If problem 4.a or 4.b is seen in both jars, then the herbicides and carrier are incompatible and should not be used in the same spray tank. Alternatively, a different tank mix compatibility agent can be evaluated.
8. If problem 4.c or 4.d occurs in the jar marked "without" but does 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 the spray system is performed.
9. If problem 4.c or 4.d is seen in the jar marked "with," the user proceeds with mixing and application at his own risk should the 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 through 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
EXTRAZINE 90DF/LASSO	Probably not needed in (Liquid Fertilizer Grade) 28-0-0, 10-34-0. Compex may help in others.
EXTRAZINE 90DF/, GENATE PLUS, SUTAN+ 6.7E	Probably not needed in 28-0-0. Incompatible in 10-34-0. Unite, Spray- Mate, Kem-Link, may help in others.
EXTRAZINE 90DF/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 re-check frequently during use whenever possible.
2. Use a pump with capacity to:
   a. Maintain 35 to 40 psi at the 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

EXTRAZINE 90 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.

General Blending Directions
EXTRAZINE 90 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 EXTRAZINE or tank mixes containing EXTRAZINE 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 EXTRAZINE 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. EXTRAZINE 90 DF may be used as the only herbicide for impregnation.

1. Add EXTRAZINE 90 DF to 1/2 the total fertilizer volume required.
2. Spray one gallon of water (to break down 90DF) 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 before adding the herbicide.
3. Add remaining fertilizer and mix thoroughly. (3 minutes or more for rotary drum blenders.)
4. Add 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. EXTRAZINE 90DF may be used in tank mixes with other dry herbicides including PRINCEP CALIBER 90. Follow the procedure as above in "A".

C. EXTRAZINE 90DF 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 EXTRAZINE 90DF. Experience has shown that this will provide the most consistent performance due to the grinding action of the fertilizer on the EXTRAZINE 90DF.
2. Spray in the EC herbicide and mix thoroughly. (3 minutes or more for rotary drum blenders).
3. Add drying agent to insure a spreadable herbicide/fertilizer mixture. Usually less drying agent is required when using EXTRAZINE 90DF.

D. Pre-slurried EXTRAZINE 90DF 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 liquid pump. Do not add extra water. Add drying agent to insure a spreadable herbicide/fertilizer mixture.

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

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

APPLICATION:
Uniform application of EXTRAZINE 4L 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 augur 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 EXTRAZINE 90DF ALONE AND IN COMBINATION WITH OTHER HERBICIDES ON CORN

Grasses

Annual bluegrass	Crabgrass	Junglerice
Annual fescues	Fall panicum	Stinkgrass (Indian lovegrass)
Annual (Italian) ryegrass	Giant foxtail	
Barnyardgrass(1)	Goosegrass	Witchgrass
Bullgrass	Green foxtail	Yellow foxtail

Broadleaves

Annual groundcherry	Florida pusley	Ragweed (Common)
Annual morningglory	(Florida purslane)	Russian thistle
Annual sedge	Hedge mustard	Shepherdspurse
Black mustard	Jimsonweed(1)	Smallflower galinsoga
Buffalobur	Kochia	Smartweed
Buttercup (annual)	Ladysthumb	(Pennsylvania)
Carpetweed	Lambsquarters	Spinysida
Cocklebur(2)	Mayweed	Sunflower(2) (wild, annual, common
Common chickweed	Nightshade (annual)	Tarweed cuphea (Gumweed)
Common groundsel	Pigweed(1)	Velvetleaf(1)
Common mallow	Pineappleweed	Wild buckwheat
Common purslane	Plantain	Wild mustard
Corn spurry	Poorjoe	Wild radish
Curly dock (seedling)	Prickly sida (teaweed)	Wild turnip
Fiddleneck	Prostrate knotweed	
	Prostrate spurge	

(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 EXTRAZINE 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.

PREEMERGENCE-PREPLANT INCORPORATED

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

EXTRAZINE 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 EXTRAZINE 90DF herbicide for the soil texture and organic matter shown in Table 1. If EXTRAZINE is applied early, more than 15 days before planting, a split application of EXTRAZINE 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 the 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 within about 10 days after application.

EXTRAZINE 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 EXTRAZINE.

EXTRAZINE Applied Alone
Use the proper rate for the soil texture and organic matter indicated in the following tables. For all states except Kentucky, Missouri, Tennessee and Kansas east of Highway 99 use Table 1.

In Kentucky, Missouri, Tennessee and Kansas east of Highway 99 use Table 2.

EXTRAZINE COMBINATIONS

EXTRAZINE plus LASSO 4EC
Use EXTRAZINE 90DF at the proper rate for the soil texture and organic matter shown in Table 3, plus 2 quarts per acre of LASSO (Use 2.5 quarts LASSO on clay soils containing 5 percent organic matter and over).

TABLE 1
PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF APPLIED ALONE ON CORN

FOR USE IN ALL STATES EXCEPT KENTUCKY, MISSOURI, TENNESSEE AND KANSAS EAST OF HIGHWAY 99

Soil Texture Description	Pounds of EXTRAZINE 90DF Percent Organic Matter in Soil*					
	Less than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	DO NOT USE	1.4	1.7	2.2	2.8	3.6
Sandy loam	1.4	1.7	2.2	2.8	3.6	4.4
Loam, Silt loam, Silt	1.7	2.2	3.1	3.6	4.4	5.0
Sandy clay loam, Clay loam, Silty clay loam	2.2	3.1	3.6	4.4	5.0	5.3
Sandy clay, Silty clay, Clay	3.1	3.6	4.4	5.0	5.3	5.8
Peat or Muck	NOT RECOMMENDED					

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

TABLE 2
PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF APPLIED ALONE ON CORN

FOR USE ONLY IN KENTUCKY, MISSOURI, TENNESSEE AND KANSAS EAST OF HIGHWAY 99

Soil Texture Description	Pounds of EXTRAZINE 90DF Percent Organic Matter in Soil*					
	Less than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	DO NOT USE	1.35	1.7	2.2	2.75	3.3
Sandy loam	1.35	2.2	2.6	3.0	3.5	4.5
Loam, Silt loam, Silt	2.2	3.3	3.6	4.0	4.5	5.0
Sandy clay loam, Clay loam, Silty clay loam,	2.75	3.6	4.0	4.5	5.0	5.3
Sandy clay, Silty clay, Clay	3.3	4.0	4.5	5.0	5.2	5.8
Peat or Muck	NOT RECOMMENDED					

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

TABLE 3
PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF USED IN TANK-MIX COMBINATIONS WITH DUAL, ERADICANE, GENATE PLUS, LASSO, OR SUTAN+ ON CORN

Soil Texture Description	Pounds of EXTRAZINE 90DF Percent Organic Matter in Soil*					
	Less than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	0.7**	0.8	1.4	1.7	1.9	2.2
Sandy loam	0.8	1.4	1.7	1.9	2.2	2.6
Loam, Silt loam, Silt	1.4	1.7	1.9	2.2	2.6	2.8
Sandy clay loam, Clay loam, Silty clay loam	1.7	1.9	2.2	2.5	2.8	3.1
Sandy clay, Silty clay, Clay	1.9	2.2	2.5	2.8	3.1	3.3
Peat or Muck	NOT RECOMMENDED					

*For organic matter content between those listed, adjust the rate proportionately.
**Do not use in the light sandy soils of the Atlantic Coastal Plain.

EXTRAZINE plus SUTAN+ 6.7E, GENATE PLUS 6.7EC or ERADICANE 6.7E Use EXTRAZINE 90DF at the proper rate for the soil texture and organic matter shown in Table 3, plus 1.8 quarts per acre of SUTAN+, GENATE PLUS or ERADICANE for control of many annual grasses and broadleaf weeds. (Use 2.4 quarts of SUTAN+, GENATE PLUS 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 of 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 upon application using power-driven cultivation equipment set for 2-3 inch 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 follow with a harrow, drag, or other leveling device. Prior to the second discing, re-adjust the disc to prevent cutting deeper than 4 inches. EXTRAZINE 90DF may be applied preemergence as an overlay over previous incorporated SUTAN+, GENATE PLUS or ERADICANE, if desired.

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+, GENATE PLUS 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+, GENATE PLUS or ERADICANE label for appropriate supplemental cultural and tillage practices.

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

EXTRAZINE Plus DUAL 8E
Use EXTRAZINE 90DF at the proper rate for soil texture and organic matter shown in Table 3. Use DUAL 8E as follows:

SOIL TEXTURE	BROADCAST RATE OF DUAL 8E PINTS PER ACRE
Coarse Sand, Loamy sand, Sandy loam	1.25 - 1.5
Medium Loam, Silt loam, Silt	1.5 - 2.0
Fine Sandy clay loam, Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay	1.5 - 2.5

The low end of the rate range should be used for lowest organic matter soils and the rate 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.

CONSERVATION TILLAGE WEED CONTROL IN CORN

Early Preplant (EPP)
Complete any planned early spring 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. Where heavy crop residues exist, the rates shown in Table 1, 2 or 3 should be increased by 25 percent.

EXTRAZINE 90DF alone: Apply 15 to 30 days prior to planting. Use the proper rate for soil texture and organic matter indicated in Table 1 or 2. **EXTRAZINE 90DF plus PRINCEP 4L or EXTRAZINE 90DF plus PRINCEP CALIBER 90:** Apply 30 days or more prior to planting. Use the proper rate of EXTRAZINE 90DF for the soil texture and organic matter indicated in Table 1 or 2 and add 1 quart/acre of PRINCEP 4L or 1.11 pounds/acre of PRINCEP CALIBER 90.

Burndown Of Existing Weeds:
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 lbs./gal.) or 2-3 pts./A. (4 lbs./gal.) (or 2,4-D Amine at recommended rates) plus ORTHO X-77 surfactant at 1 qt./100 gals. of diluted spray, or other suitable non-ionic surfactant at its recommended rate.

Combinations with Paraquat Products: When grasses are present and/or when existing weeds exceed 3 inches in height, add paraquat at 1-2 pts./A. (2 lb/gal) or 1.3-2.7 pts./A. (1.5 lb/gal) to the above mixture. Well established weeds over 6 inches tall may not be well controlled. Use 20-60 gal./A. of spray mixture by ground rig. (Use the higher gallonages for heavy infestations of weeds.) Add 1 to 2 pints of a non-ionic surfactant per 100 gallons of spray. Using fertilizer solutions containing phosphates as a carrier will reduce the activity of paraquat products.

Sequential Treatments: Depending upon the application timing and the weather conditions following the EPP application, a sequential herbicide treatment may be necessary to provide additional length of weed control. This may be a postemergence treatment with BLADEX, CONQUEST, EXTRAZINE, EXTRAZINE II or some other herbicide treatment applied at or after planting. If desired, 1-1/2 - 2 pts./A. of DUAL or 2 qts./A. of LASSO may be tank mixed with the EXTRAZINE EPP treatment or applied preemergence at planting.

Rotational Crops: Refer to the General Information section of this label and to the labels of all products used in combination or in sequence.

At Planting
EXTRAZINE 90DF applied alone or in combination with 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 tillage.

Apply EXTRAZINE 90DF 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 EXTRAZINE rate shown in Table 1, 2 or 3 should be increased by 25 percent. Add 2,4-D LV Ester at 1/2 - 1 pt./A. (6 lbs./gal.) or 0.75 - 1.5 pt./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 25 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 ORTHO X-77 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 an adjuvant. 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 2 pints/A. (2 lbs/gal) or 2.7 pints/A. (1.5 lbs/gal) paraquat in combination with EXTRAZINE as described above in this section, except the 2,4-D may be omitted, if desired. 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 surfactant, such as ORTHO X-77, 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 as 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.

EXTRAZINE Applied Alone
Use EXTRAZINE 90DF at the proper rate for the soil texture and organic matter shown in Table 4 or 5. Use rates shown in Table 4 if EXTRAZINE, BLADEX, CONQUEST or EXTRAZINE II has not been applied to the soil this season. Use rates shown in Table 5 if EXTRAZINE, BLADEX, CONQUEST or EXTRAZINE II has 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 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 in a liquid fertilizer carrier or in tank mix combinations with LASSO or DUAL.

Rotational Crops: Refer to the General Information section of the label.

EXTRAZINE plus BANVEL
EXTRAZINE 90DF may be applied at the rates shown in Tables 4 and 5 with 1/2 to 2/3 pints per acre of BANVEL. Do not use with a surfactant or crop oil.

TABLE 4
POSTEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF ON CORN
NO PRIOR APPLICATION OF BLADEX, CONQUEST, EXTRAZINE OR EXTRAZINE II

	Pounds of EXTRAZINE 90DF			
	Percent Organic Matter in Soil*			
Soil Texture	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 loam, Silt	1.8	2.2	2.2	2.2
All other textures	2.2	2.2	2.2	2.2

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

TABLE 5
POSTEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF ON CORN WITH BLADEX, CONQUEST, EXTRAZINE OR EXTRAZINE II USED IN PRIOR APPLICATION

	Pounds of EXTRAZINE 90DF			
	Percent Organic Matter in Soil*			
Soil Texture	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	1.75	2.2
Loam, Silt loam, Silt	DO NOT USE	1.5	2.2	2.2
All other textures	DO NOT USE	2.0	2.2	2.2

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

SWEET CORN

EXTRAZINE 90DF may be applied preemergence or preplant incorporated for the control of annual grasses and broadleaf weeds in sweet corn.

NOTE: EXTRAZINE 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 EXTRAZINE 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 an EXTRAZINE mixture is to be incorporated, except as noted, single or two pass incorporation is acceptable. Care should be taken to incorporate the EXTRAZINE mixture no deeper than the top two inches of soil.

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.

EXTRAZINE Alone
Apply EXTRAZINE 90DF at the proper rate for soil texture and organic matter indicated in Table 6.

EXTRAZINE PLUS LASSO 4EC
Use EXTRAZINE 90DF at the proper rate for the soil texture and organic matter shown in Table 7 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.

EXTRAZINE PLUS SUTAN+ 6.7E, GENATE PLUS 6.7EC OR ERADICANE 6.7E
Do not use combinations with SUTAN+, GENATE PLUS or ERADICANE in New Jersey. Use EXTRAZINE 90DF at the proper rate for the soil texture and organic matter shown in Table 7 plus 1.8 quarts per acre of SUTAN+, GENATE PLUS or ERADICANE for control of many annual grasses and broadleaf weeds. (Use 2.4 quarts of SUTAN+, GENATE PLUS 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 I percent organic matter nor on the light sandy soils of eastern coastal states. Do not use on corn grown for seed.

TABLE 6
PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF APPLIED ALONE ON SWEET CORN

	Pounds of EXTRAZINE 90DF					
	Percent Organic Matter in Soil*					
Soil Texture Description	Less than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	DO NOT USE	1.3	1.8	2.1	2.6	3.0
Sandy loam	DO NOT USE	1.6	2.1	2.6	3.3	4.4
Loam, Silt loam, Silt	DO NOT USE	2.1	2.6	3.3	4.1	4.9
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	2.6	3.1	4.1	4.9	5.4
Sandy clay, Silty clay, Clay	DO NOT USE	3.1	4.4	4.9	5.4	5.8
Peat or Muck	NOT RECOMMENDED					

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

TABLE 7
PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF USED IN TANK MIX COMBINATIONS WITH LASSO, SUTAN+, GENATE PLUS, ERADICANE OR DUAL ON SWEET CORN

Soil Texture Description	Pounds of EXTRAZINE 90DF Per Acre for Percent Organic Matter in Soil*					
	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	2.4
Loam, Silt loam, Silt	DO NOT USE	1.6	1.8	2.2	2.4	2.9
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	2.0	2.2	2.4	2.9	3.1
Sandy clay, Silty clay loam	DO NOT USE	2.2	2.7	2.9	3.1	3.3
Peat or Muck	NOT RECOMMENDED					

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

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. EXTRAZINE 90DF may be applied preemergence as an overlay over previously incorporated SUTAN+, GENATE PLUS or ERADICANE, if desired. 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+, GENATE PLUS or ERADICANE combinations:

Grasses

Sandbur	Shattercane (Wild Cane)*
Quackgrass (ERADICANE Only)	Texas Panicum
Wild Proso Millet* (ERADICANE only)	

Perennial Weeds

Yellow Nutsedge (Nutgrass)	Purple Nutsedge (Nutgrass)

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

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

EXTRAZINE PLUS DUAL 8E

Use EXTRAZINE 90DF at the proper rate for soil texture and organic matter shown in Table 7. Use DUAL as follows:

SOIL TEXTURE	BROADCAST RATE OF DUAL 8E PINTS PER ACRE
Coarse Sand, Loamy sand, Sandy loam	1.25 - 1.5
Medium Loam, Silt loam, Silt	1.5 - 2.0
Fine Sandy clay loam, Silty clay loam, Clay loam, Sandy clay, Silty clay, Clay	1.5 - 2.5

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.

FALLOW CROPLAND

Weeds Controlled by EXTRAZINE 90DF Alone and in Tank-Mix Combinations

Grasses

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

Broadleaves

Cocklebur(1)	Pennycress	Smartweed
Common chickweed	Pigweed(1)	(Pennsylvania)
Dog fennel	Prickly lettuce	Sunflower (wild)(1)
False flax	Prostrate knotweed	Purple mustard
Henbit	Prostrate spurge	Tansy mustard
Horseweed (marestail)	Purslane	Tumble mustard
Kochia	Russian thistle	Wild radish
Lambsquarters	Shepherdspurse	Wild buckwheat(1)

Additional weeds controlled are listed in the Corn section of this label.

(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.

EXTRAZINE 90DF may be used alone or in tank-mix combination for the control of certain annual weeds during a fallow program.

EXTRAZINE 90DF should be used in tank-mix combination with ROUNDUP, 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 at 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 and at least 25 gallons per A. of carrier, unless Roundup is used. Refer to EXTRAZINE Combination With Roundup in this section of the label for specific instructions.

EXTRAZINE 90DF Alone
EXTRAZINE 90DF may be used 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 EXTRAZINE 90DF for a particular location from Table 8. Add ORTHO X-77 surfactant at 1 quart per 100 gallons of diluted spray. Do not use this treatment on sands or on Rosebud or Canyon series soils, or on calcareous or caliche outcroppings because of possible carryover damage to the succeeding crop.

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

TABLE 8
BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 90DF ON FALLOW CROPLAND*

LOCATION/TREATMENT	LBS/ACRE EXTRAZINE 90DF
FALL APPLICATION PRIOR TO WINTER WHEAT Kansas, Southern Nebraska, Oklahoma, Colorado East of I-25	2.7

* Use an additional 0.4 pounds per acre of BLADEX 90DF for soils with 2.0 to 3.0 percent organic matter.
Use an additional 0.9 pounds per acre of BLADEX 90DF for soils containing more than 3.0 percent organic matter.

Note: If conditions cause weeds to begin to germinate in the spring or summer following a post-harvest treatment of EXTRAZINE, an application of BLADEX 90DF may be made for additional weed control in the spring or summer prior to planting winter wheat. Apply as directed in the BLADEX 90DF Applied Alone, Fallow section of the BLADEX 90DF label. Do not make more than two applications of BLADEX or EXTRAZINE prior to planting.

EXTRAZINE Combinations With Paraquat
On fallow cropland having an existing or established weed population, paraquat may be tank mixed at 1 to 2 pints per acre (2 lbs/gal) or 1.3 to 2.7 pints per acre (1.5 lbs/gal) with EXTRAZINE as previously described in this section. Apply the recommended rates in at least 20 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 ORTHO X-77 surfactant at 1 quart per 100 gallons of diluted spray.

EXTRAZINE Combinations With 2,4-D
2,4-D LV Ester may be added to help control broadleaf weeds growing at the time of application. Use 1-1/3 to 2 pints per acre of 2,4-D LV 6-pound Ester (2 to 3 pints per acre of 2,4-D LV 4-pound 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.

EXTRAZINE Combination with Roundup
On fallow cropland having an existing or established weed population, Roundup may be tank mixed at 1 pint per acre with EXTRAZINE as previously described in this section. Apply the recommended rate of Roundup plus 0.5 to 1 percent non-ionic surfactant by total spray volume in 5 to 10 gallons of spray mixture per acre by ground rig. Refer to the Roundup label for specific application directions and weeds controlled with ROUNDUP

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.

GRAIN SORGHUM (MILO)

(See the GENERAL INFORMATION section of this label)

EXTRAZINE 90DF and its tank mixes may be applied preemergence or early preplant on grain sorghum grown under conventional or conservation tillage systems. Do not use on forage sorghums. Use on grain sorghum only in the states of Kansas, Nebraska and South Dakota.

Tank-mix combinations of EXTRAZINE 90DF plus metolachlor (DUAL), alachlor (LASSO), or propachlor (RAMROD) may be used for selective preemergence weed control in grain sorghum. In addition, EXTRAZINE 90DF may be used alone or in tank-mix combinations with DUAL or LASSO for the control of weeds in early spring, early preplant, 14 to 35 days or more prior to planting grain sorghum.

Weeds Controlled by Extrazine 90DF on Grain Sorghum (Milo)

Grasses

Cheat	Green foxtail	Volunteer wheat (2)
Crabgrass	Stinkgrass	Yellow foxtail
Downy brome	(Indian lovegrass)	

Broadleaves

Annual Morningglory	Lambsquarters	Russian thistle
Blue mustard	Pennsylvania smartweed	Shepherdspurse
Carpetweed	Pennycress	Sunflower (1)
Cocklebur (1)	Prickly lettuce	Tansy mustards
Common purslane	Prostrate pigweed	Velvetleaf
Flixweed	Ragweed (Common)	Virginia Pepperweed
Horseweed (marestail)	Redroot pigweed	Wallflower mustard
Kochia		

(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 be weak early if heavy rainfall occurs between application and planting.

General Directions For Use On Grain Sorghum
EXTRAZINE used alone or in tank-mixes with the products listed above should be applied only once per crop season or in an 80%-20% split treatment. If replanting of grain sorghum is necessary, it may be planted in soil previously treated with these mixtures. Apply EXTRAZINE 90DF alone or these tank-mix combinations before the crop has emerged.

Precautions: Do not make an additional application of EXTRAZINE, BLADEX 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 the seed furrow, resulting in possible crop injury. Level deep planter marks or seed furrows before application. Do not apply to furrow-planted sorghum.

Application to sorghum growing under stress caused by minor element deficiency or to sorghum growing on highly calcareous soil (high pH) may result in crop 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.

If Atrazine was used the previous year and there is residual Atrazine in the soil, do not exceed the cumulative amount of Atrazine. The probability of carryover into the next crop increases with late fall application, dry weather and/or soil pH greater than 7.5. 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 EXTRAZINE 4L or 90DF or BLADEX 90DF, 80W, or 4L) at planting, and/or a 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: For sorghum grown under this rotation, an EXTRAZINE 90DF preemergence or early preplant treatment may be used. If an early preplant application with EXTRAZINE 90DF 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. (1 lb. EXTRAZINE contains 0.3 lbs. atrazine). Even this or lower rates may carry over to injure rotational crops, especially in cases of low rainfall and soil pH above 7.5.

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. (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 WEED CONTROL IN SORGHUM
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.

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 were 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 because they aid in the burndown of existing weeds. In addition, crop oil or a non-ionic 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-D 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 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 non-ionic adjuvant such as ORTHO X-77 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 6-8 inches tall or taller may not be completely controlled with paraquat.

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

EARLY PREPLANT

EXTRAZINE 90DF APPLIED ALONE
EXTRAZINE 90DF provides control of weeds listed on this label in the Weeds Controlled section for EXTRAZINE 90DF 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 rain 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 EXTRAZINE 90DF at the proper rate for soil texture and time interval indicated in Table 9.

Split Applications: EXTRAZINE 90DF dosage rates in Table 9 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 after the initial application, the remaining 20% at planting time may be omitted to reduce the chances of crop injury.

EXTRAZINE COMBINATIONS

EXTRAZINE 90DF in combination with DUAL or LASSO applied early preplant provides control of weeds listed on this label in the Weeds Controlled section for EXTRAZINE 90DF 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 re-treatment Refer to the General Information section of the label for additional information regarding crop rotation.

EXTRAZINE PLUS ATRAZINE

EXTRAZINE 90DF may be combined with atrazine at rates up to 0.3 lb. of atrazine per pound of EXTRAZINE 90DF and applied as total triazine at the rates shown for EXTRAZINE in Tables 9, 10 or 11.

EXTRAZINE PLUS DUAL

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

TABLE 9
EARLY PREPLANT BROADCAST APPLICATION RATES OF EXTRAZINE 90DF ON GRAIN SORGHUM (0.8% TO 3% Organic Matter Soils)

Soil Texture Description	Lbs./Acre of EXTRAZINE 90DF DAYS PRIOR TO PLANTING(a,c) 14 DAYS	28 DAYS	35 DAYS
Sand, Loamy sand	——DO NOT USE——		
Sandy loam	2.0(b)	2.7	3.3
Loam, Silty loam, Silt	2.5	3.3	3.9
Sandy clay loam, Clay loam, Silty clay loam	3.3	3.9	4.4
Sandy clay, Silty clay, Clay	3.6	3.9	5.0
Peat or Muck	NOT RECOMMENDED		
Eroded Slopes or Knobs, Soils with pH greater than 8.0	NOT RECOMMENDED		

(a) For intervals longer than 35 days due to delayed planting, etc., another herbicide treatment is needed before, at, or after planting.
(b) For sandy loam soils containing less than 1.5% O.M., increases the treatment interval from 14 to 21 days. Use the 14 day interval for sandy soils containing more than 1.5%.
(c) For rates between those listed at 14 and 35 days, adjust the rate proportionately.

TABLE 10
EARLY PREPLANT BROADCAST APPLICATION RATES PER ACRE IN POUNDS OF EXTRAZINE AND PINTS OF DUAL 8E ON GRAIN SORGHUM (a, b)

Soil Texture Description	(0.8% TO 3% Organic Matter) DAYS PRIOR TO PLANTING* 14 DAYS Extrazine 90DF + Dual 8E	28 DAYS(c) Extrazine 90DF + Dual 8E
Sand, Loamy sand	DO NOT USE	1.7 + 2.0
Sandy loam	1.4(d) + 1.5	1.8 + 2.0
Loam, Silty loam, Silt	1.8 + 1.5	2.2 + 2.0
Sandy clay loam, Clay loam, Silty clay loam	2.2 + 1.75	2.8 + 2.0
Sandy clay, Silty clay, Clay	2.5 + 1.75	3.0 + 2.0
Peat or Muck	NOT RECOMMENDED	
Eroded Slopes or Knobs Soils with pH greater than 8.0	NOT RECOMMENDED	

a) The first number is pounds/acre of EXTRAZINE 90DF. The second number is pints/acre of Dual 8E.
(b) If using Dual 8E on sorghum, Concep II 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.

Use EXTRAZINE 90DF plus DUAL at the proper rate for soil texture and time interval indicated in Table 10.

EXTRAZINE PLUS LASSO

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

Use EXTRAZINE 90DF plus LASSO at the proper rate for soil texture and time interval indicated in Table 11.

PREEMERGENCE OR SHALLOW PREPLANT INCORPORATION

EXTRAZINE COMBINATIONS

EXTRAZINE 90DF plus DUAL, LASSO or RAMROD applied preemergence or with shallow incorporation provides control of weeds listed on this label in the Weeds Controlled section for EXTRAZINE 90DF on grain sorghum.

TABLE 11
EARLY PREPLANT BROADCAST APPLICATION RATES PER ACRE IN POUNDS. OF EXTRAZINE 90DF AND QUARTS OF LASSO 4EC ON GRAIN SORGHUM (a, b)

Soil Texture Description	(0.8% TO 3% Organic Matter) DAYS PRIOR TO PLANTING*	
	14 DAYS Extrazine 90DF+Lasso 4EC	28 DAYS(c) Extrazine 90DF+Lasso 4EC
Sand, Loamy sand	DO NOT USE	1.5 + 2.5
Sandy loam	1.25(d) + 2.0	1.6 + 2.5
Loam, Silty loam, Silt	1.6 + 2.0	2.0 + 2.5
Sandy clay loam, Clay loam, Silty clay loam	2.0 + 2.25	2.5 + 2.5
Sandy clay, Silty clay, Clay	2.25 + 2.25	2.75 + 2.5
Peat or Muck	NOT RECOMMENDED	
Eroded Slopes or Knobs Soils with pH greater than 8.0	NOT RECOMMENDED	

(a) The first number is pounds/acre of EXTRAZINE 90DF. The second number is quarts/acre of Lasso 4EC.
(b)When using Lasso 4EC on sorghum, only 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.

TABLE 12
PREEMERGENCE OR SHALLOW PREPLANT INCORPORATION BROADCAST APPLICATION RATES IN POUNDS OF EXTRAZINE 90DF PLUS PINTS OF DUAL 8E PER ACRE ON GRAIN SORGHUM (a, b, c)

Soil Texture Description	Pounds of Extrazine 90DF + Pints of Dual 8E Percent Organic Matter in Soil*			
	Less than 1%	1%	2%	3%
Sand,Loamy sand	——DO NOT USE——			
Sandy loam	——DO NOT USE——			
Loam,Silty loam,Silt	DO NOT USE	1.0 + 1.5	1.2 + 1.5	1.4 + 1.5
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	1.2 + 1.5	1.4 + 1.75	1.6 + 1.75
Sandy clay, Silty clay, Clay	DO NOT USE	1.4 + 1.5	1.6 + 1.75	1.8 + 2.0
Peat or Muck	NOT RECOMMENDED			
Eroded Slopes or Knobs Soils with pH greater than 8.0	NOT RECOMMENDED			

(a)The first number is pounds/acre of EXTRAZINE 90DF. The second number is pints/acre of Dual 8E.
(b) When using Dual 8E on sorghum, only Concep II safened seed should be planted.
(c) To enhance weed control in areas of less than 25 inches of annual 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, adjust the rate proportionately.

Additional weeds controlled by 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 this combination is lost, corn or grain sorghum may be replanted immediately without re-treatment. Refer to the "General Information" section of the EXTRAZINE label for additional information regarding crop rotation.

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

Use EXTRAZINE 90DF plus DUAL at the proper rate for soil texture and organic matter indicated in Table 12.

EXTRAZINE PLUS LASSO
LASSO can be used on grain sorghum only with seed treated with SCREEN seed safener.

Use EXTRAZINE 90DF plus LASSO at the proper rate for soil texture and organic matter indicated in Table 13.

EXTRAZINE PLUS RAMROD
Use EXTRAZINE 90DF plus RAMROD at the proper rate for soil texture and organic matter indicated in Table 14.

TABLE 13
PREEMERGENCE OR SHALLOW PREPLANT INCORPORATION BROADCAST APPLICATION RATES IN POUNDS OF EXTRAZINE 90DF PLUS QUARTS OF LASSO EC PER ACRE ON GRAIN SORGHUM (a, b, c)

	Lbs. of Extrazine 90DF + Quarts of Lasso EC			
	Percent Organic Matter in Soil*			
Soil Texture Description	Less than 1%	1%	2%	3%
Sand, Loamy sand	----DO NOT USE----			
Sandy loam	DO NOT USE	DO NOT USE	1.0 + 2.0	1.2 + 2.0
Loam,Silty loam, Silt	DO NOT USE	1.0 + 2.0	1.2 + 2.0	1.4 + 2.0
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	1.2 + 2.25	1.4 + 2.25	1.6 + 2.25
Sandy clay, Silty clay, Clay	DO NOT USE	1.4 + 2.25	1.6 + 2.25	1.6 + 2.5
Peat or Muck	NOT RECOMMENDED			
Eroded Slopes or Knobs Soils with pH greater than 8.0	NOT RECOMMENDED			

(a) The first number is pounds/acre of EXTRAZINE 90DF. The second number is quarts/acre of Lasso EC.
(b) When using Lasso 4EC on sorghum, only Screen safened seed should be planted.
(c) To enhance weed control in areas of less than 25 inches of annual 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.

TABLE 14
PREEMERGENCE BROADCAST APPLICATION RATES IN POUNDS OF EXTRAZINE 90DF PLUS QUARTS OF PROPACHLOR (RAMROD) 4L PER ACRE ON GRAIN SORGHUM (a)

	Percent Organic Matter in Soil*	
Soil Texture Description	2% Extrazine 90DF + Ramrod 4L	3% Extrazine 90DF + Ramrod 4L
Sand, Loamy sand	——DO NOT USE——	
Sandy loam	1.0 + 2.5	1.2 + 3.0
Loam, Silty loam, Silt	1.2 + 3.0	1.4 + 3.5
Sandy clay loam, Clay loam, Silty clay loam	1.4 + 3.5	1.6 + 4.0
Sandy clay, Silty clay, Clay	1.6 + 4.0	1.6 + 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/acre of EXTRAZINE 90DF. The second number is quarts/acre of Ramrod 4L.
*For organic matter content between those listed, adjust the rate proportionately.

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, soak up with sand, earth or synthetic absorbent. Do not use alkaline absorbents, 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.

NOTICE OF WARRANTY

Du Pont 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 Du Pont. In no case shall Du Pont 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. DU PONT MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS NOTED ABOVE.

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