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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Tony E. Catka  
Registration Specialist  
Registration and Regulatory Affairs  
DuPont Agricultural Products  
Walkers Mill, Barley Mill Plaza  
P.O. Box 80038  
Wilmington, DE 19880-0038

Dear Mr. Catka:

Subject: Du Pont Extrazine II 4L  
EPA Reg. No. 352-500  
Du Pont Extrazine II DF  
EPA Reg. No. 352-497  
Re: Label Amendment (Risk Reduction Measures)  
Your Submission Dated June 5, 1992

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. Stamped copies are enclosed for your records.

Sincerely Yours,

Robert J. Taylor  
Product Manager (25)  
Fungicide-Herbicide Branch  
Registration Division (875050)

CONCURRENCES

SYMBOL	H788C						
SURNAME	Musill						
DATE	6/18/92						

# RESTRICTED USE PESTICIDE

(GROUND AND SURFACE WATER CONCERNS) 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.

THIS PRODUCT IS A RESTRICTED USE HERBICIDE DUE TO GROUND AND SURFACE WATER CONCERNS. USERS MUST READ AND FOLLOW ALL PRECAUTIONARY STATEMENTS AND INSTRUCTIONS FOR USE IN ORDER TO MINIMIZE POTENTIAL FOR ATRAZINE TO REACH GROUND AND SURFACE WATER.

REGISTRATION CODE 0000-000  
PACKAGE SIZE  
BULK



# EXTRAZINE® II 4L

## Herbicide

This product contains 4 pounds active ingredients per gallon.

LIQUID

ACTIVE INGREDIENTS	BY WEIGHT
Cyanazine: 2-[[4-chloro-6-(ethylamino)-s-triazin-2-yl]amino]-2-methylpropionitrile.....	32.0%
Atrazine: 2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine.....	10.4%
Related compounds.....	0.6%
INERT INGREDIENTS.....	57.0%
	TOTAL 100.0%

EPA Reg. No. 352-500

## 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 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**IF IN EYES:** Flush with plenty of water. Call a physician.

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

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. 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 has been 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.

Users are required to wear long trousers, long-sleeved clothing, chemical resistant gloves, and boots (waterproofed), when using this product. In addition, wear chemical resistant rubber or neoprene gloves extending above the wrist, a chemical resistant apron, long trousers, long-sleeved clothing, and face shield or goggles 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.

PRECAUTIONARY STATEMENTS (continued on next page)

## PRECAUTIONARY STATEMENTS (continued)

### ENVIRONMENTAL HAZARDS

Cyanazine and Atrazine, the active ingredients of "EXTRAZINE" II, 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. Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material. Users are advised not to apply "EXTRAZINE" II 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.

### DIRECTIONS FOR USE

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

### GENERAL INFORMATION

EXTRAZINE II 4L Herbicide is a selective herbicide for the control of annual grasses and broadleaf weeds in field corn, popcorn, and sweet corn.

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

EXTRAZINE II 4L is not effective when used preemergence on peat or muck soils. Do not use EXTRAZINE II 4L on sands or loamy sands (soils consisting of more than 70% sand) containing less than 1% organic matter.

This product may not be mixed/loaded or used within 50 feet of all wells, including abandoned wells, drainage wells, and sink holes. This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied aerially or by ground within 66 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 ft. around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66 foot buffer or set-back from runoff points must be planted to crop or seeded with grass or other suitable crop.

Do not apply this product through any type of irrigation system.

Do not apply this product with aerial application equipment.

Postemergence application to corn must be made before corn reaches 12 inches in height.

Applications for quackgrass suppression in corn are restricted to a spring application only. No fall applications are permitted.

**Atrazine Rate Limits:** One quart of EXTRAZINE II 4L contains 0.25 pounds active ingredient atrazine. For soil applications prior to crop emergence (i.e., early preplant, preplant incorporated, preplant surface, at planting or preemergence) the following applies:

- On highly erodible soils, as defined by the Soil Conservation Service (SCS), if conservation tillage is utilized (> or = 30% plant residue), the maximum rate of atrazine from all sources is 2 pounds a.i./A. If plant residue is <30%, the maximum rate of atrazine is 1.6 pounds a.i./A.
- On soils not high, erodible, the maximum rate of atrazine is 2 pounds a.i./A.

For postemergence applications, if there has been no previous soil application to that crop, the maximum rate of atrazine from all sources is 2 pounds a.i./A. If there has been a previous soil application to that crop, do not exceed a total of 2.5 pounds atrazine a.i./A per calendar year.

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

**Weather Effects:** As a preemergence herbicide, EXTRAZINE II 4L is active mainly through the roots, and, therefore, its effect on weeds is dependent on adequate rainfall 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 about ten days after application of EXTRAZINE II 4L.

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

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

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

To enhance weed control in areas of less than 25 inches of rainfall or where long dry periods are common, these treatments may require shallow incorporation with a tool such as a field cultivator operated from 5-7 mph. Incorporation should not be more than three inches deep to keep from burying the herbicide. A spike-toothed harrow, deep tillage disk or rolling basket device is not recommended for incorporating EXTRAZINE II 4L.

When applied as a post-emergence herbicide, EXTRAZINE II 4L is also active through foliage as well as through the roots. Yellowing and/or stunting of the crop may result from this treatment, particularly if cold, adverse growing conditions occur after application. Extended or extreme cold and wet conditions may reduce stands. Do not apply EXTRAZINE II 4L postemergence to a crop that is damaged or growing under stress.

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

**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 inter-mountain 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.

**Triazine Resistant Weeds:** In fields where triazine resistant biotypes of weeds have been identified, EXTRAZINE II 4L 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 mixed/loaded, or used within 50 feet of all wells including abandoned wells, drainage wells and sink holes.

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

Use sufficient agitation to ensure that the EXTRAZINE II 4L is completely dispersed and in uniform suspension prior to application or tank mixing with other formulations.

The following general mixing instructions are recommended:

#### I. 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 on corn. Do not apply fertilizer mixtures after crop emerges, as 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 used 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 II 4L 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 crop oil, crop oil concentrate, or other tank mix formulations should be added at this time. Pre-slurry these added ingredients before addition, if the compatibility test shows it to be necessary.
9. Complete filling tank, maintaining sufficient agitation at all times to ensure surface action. This applies to both spray and nurse tanks.
10. Tank mixtures should always be applied immediately after preparation. If, for any reason, this is not possible, assure that sufficient agitation has been provided to re-mix all products and check for complete 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 emulsible concentrate film starts to build up after using these formulations, drain and clean the tank with strong detergent solution or appropriate solvent.

13. It is recommended that the sprayer be thoroughly cleaned by flushing with a detergent solution at the end of each work day when any emulsible crop oil, crop 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 II 4L use rate for this evaluation

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

This chart is based on 1 quart of EXTRAZINE II 4L (1.0 pound active ingredient) per acre in the indicated carrier volumes. Intended field use rates are achieved by varying the amount of EXTRAZINE II 4L. (e.g., for a field use rate of 3 quarts of EXTRAZINE II 4L in 15 gallons of carrier per acre, add 4.8 teaspoons of EXTRAZINE II 4L to the quart jars containing 1 pint of carrier. Calculation: 3 quarts of EXTRAZINE II 4L/15 gallons of carrier per acre = 3 X 1.6 = 4.8 teaspoons of EXTRAZINE II 4L 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.

Tank Mix Combination	Compatibility Agents
EXTRAZINE II 4L/LASSO (Liquid Fertilizer Grade)	Probably not needed in 28-0-0, 10-34-0. Compex may help in others.
EXTRAZINE II 4L/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 II 4L/DUAL 8E	Probably not needed in 28-0-0. Unite, Spray-Mate, Ivory Liquid may help in others.

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

### 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 II 4L 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 II 4L 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 II 4L or tank mixes containing EXTRAZINE II 4L 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 II 4L 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 II 4L may be used as the only herbicide for impregnation.

1. Add EXTRAZINE II 4L to the total fertilizer volume required and mix thoroughly.
2. Add Ag-Sorb or MP-79 drying agent (or a suitable amount of another effective drying agent) as needed 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 II 4L may be used in tank mixes with other herbicides registered for this use. The amount of drying agent needed will vary depending on whether the product is a dry or liquid formulation. EXTRAZINE II 4L and SUTAN+, ERADICANE, DUAL or LASSO can be mixed together in the proper use ratio for simultaneous impregnation. If there is a mixing compatibility problem then add the EXTRAZINE II 4L first as follows:

1. While fertilizer is blending, add the EXTRAZINE II 4L.
2. Spray in the EC herbicide and mix thoroughly for at least 3 minutes.
3. Add drying agent to insure a spreadable herbicide/fertilizer mixture. Generally less than 2% by weight of drying agent will be needed.

(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 II 4L or combinations including EXTRAZINE II 4L must be cleaned out by running at least 1,000 lbs. of fertilizer not impregnated with EXTRAZINE II 4L through the impregnation equipment and application equipment, if the next batch of material is to be applied to a crop for which EXTRAZINE II 4L or a combination herbicide is not registered.

**APPLICATION:** Uniform application of EXTRAZINE II 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 II 4L 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	Witchgrass
Barnyardgrass(1)	Goosegrass	Yellow foxtail
Bullgrass	Green foxtail	

## Broadleaves

Annual ground cherry	Florida pusley	Ragweed (Common)
Annual morning glory	(Florida purslane)	Russian Thistle
Annual sedge	Hedge mustard	Shepherdspurse
Black mustard	Jimsonweed(1)	Smartweed
galinsoga		(Pennsylvania)
Buffalobur	Kochia	Spiny sida
Buttercup (annual)	Ladysthumb	Sunflower(2) (wild, annual, common)
Carpetweed	Lambsquarters	Tarweed cuphea
Common chickweed	Mayweed	(Gumweed)
Cocklebur(2)	Nightshade (annual)	Velvetleaf(1)
Common groundsel	Pigweed(1)	Wild buckwheat
Common mallow	Pineappleweed	Wild mustard
Common purslane	Plantain	Wild radish
Corn spurry	Poorjoe	Wild turnip
Curly dock (seedling)	Prickly sida (teaweed)	
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 II 4L 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 seeds.

## PREEMERGENCE-PREPLANT INCORPORATED

Apply EXTRAZINE II 4L 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.

EXTRAZINE II 4L 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 II 4L for the soil texture and

organic matter shown in Table 1. If EXTRAZINE II 4L is applied early, more than 15 days before planting, a split application of EXTRAZINE II 4L 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 label.

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

EXTRAZINE II 4L 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 II 4L.

See the Rotational Crops statement in the General Information section of the label.

## EXTRAZINE II 4L Applied Alone

Use at the proper rate for soil texture and organic matter indicated in Table 1.

## EXTRAZINE II 4L COMBINATIONS

### EXTRAZINE II 4L plus LASSO 4EC

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

### EXTRAZINE II 4L plus SUTAN+ 6.7E/GENATE PLUS or ERADICANE 6.7E

Use EXTRAZINE II 4L at the proper rate for the soil texture and organic matter shown in Table 2 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.) 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 to 3 inch depth, or a tandem disc set to cut to a depth of about 4 inches while operating at 4 to 6 mph. For thorough mixing, disc in two directions (cross disc), and

**TABLE 1  
PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR "EXTRAZINE" II 4L  
APPLIED ALONE ON CORN**

Soil Texture Description	Quarts of "EXTRAZINE" II 4L					
	Percent Organic Matter in Soil*					
	Less Than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	DO NOT USE	1.25	1.5	2.0	2.5	3.25
Sandy loam	1.25	1.5	2.0	2.5	3.25	4.0
Loam, Silty loam, Silt	1.5	2.0	2.75	3.25	4.0	4.25
Sandy Clay loam, Clay loam, Silty clay loam	2.0	2.75	3.25	4.0	4.5	4.75
Sandy clay, Silty clay, Clay	2.75	3.25	4.0	4.5	4.75	5.25
Pea 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" II 4L USED IN TANK MIX COMBINATIONS WITH "LASSO", "SUTAN+", "GENATE PLUS", "ERADICANE", OR "DUAL" ON CORN**

Soil Texture Description	Quarts of EXTRAZINE II 4L					
	Percent Organic Matter in Soil*					
	Less Than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	0.6**	0.75	1.25	1.5	1.75	2.0
Sandy loam	0.75	1.25	1.5	1.75	2.0	2.25
Loam, Silt loam, Silt Sandy clay loam,	1.25	1.5	1.75	2.0	2.25	2.5
Clay loam, Silty clay loam	1.5	1.75	2.0	2.25	2.5	2.75
Sandy clay, Silty clay, Clay	1.75	2.0	2.25	2.5	2.75	3.0
Peat or Muck	NOT RECOMMENDED					

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

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 II 4L 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  
 Texas Panicum  
 Shattercane (Wild Cane)\*  
 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 supplement 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 II 4L plus DUAL 8E**

Use EXTRAZINE II 4L at the proper rate for soil texture and organic matter shown in Table 2. Use DUAL as follows:

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

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 additional precautions on rotational crops.

**CONSERVATION TILLAGE WEED CONTROL**

**Early Preplant (EPP)**

EXTRAZINE II 4L may be used for Early Preplant or Preemergence weed control for land going into the production of corn under conservation tillage programs. 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. A nitrogen solution or complete fertilizer solution may replace all or part of the water as a carrier. The spray gallonage and spray boom design must be adequate to give thorough uniform coverage of the weed foliage. Follow label requirements of all products used in tank mix combinations.

**EXTRAZINE II 4L alone:** Apply 15 to 30 days prior to planting. Use the proper rate for soil texture and organic matter indicated in Table 1. Where heavy crop residues exist, the rates shown in Table 1 should be increased by 25 percent.

**EXTRAZINE II 4L plus PRINCEP 4L or EXTRAZINE II 4L plus PRINCEP CALIBER 90:** Apply 30 days or more prior to planting. Use the proper rate of EXTRAZINE II 4L for the soil texture and organic matter indicated in Table 1 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. When 2,4-D Ester is tank mixed with EXTRAZINE II 4L as described, these additional weeds will be controlled: Buckwheat, Dandelion, Dock, Maretail, Pennycress, Pigweed, lettuce and Tansy Mustard.



Combinations with Paraquat Products or ROUNDUP. 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) or 2 pts./A. of ROUNDUP to the above mixture. Well established weeds over 6 inches tall may not be well controlled. With paraquat use 20-40 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 II 4L 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 II 4L 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 II 4L 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 II 4L rate shown in Table 1 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 II 4L 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.

**TABLE 3**  
**POSTEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR "EXTRAZINE" II 4L ON CORN**  
**NO PRIOR APPLICATION OF "BLADEx", "CONQUEST", "EXTRAZINE" OR "EXTRAZINE" II**

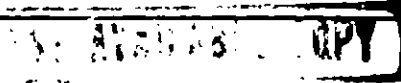
Soil Texture Description	Quarts of EXTRAZINE II 4L			
	Percent Organic Matter In Soil*			
	Less Than 1%	1%	2%	Over 2%
Sand, Loamy sand	DO NOT USE	1.25	1.5	2.0
Sandy loam	1.25	1.5	2.0	2.0
Loam, Silt loam, Silt	1.5	2.0	2.0	2.0
All other textures	2.0	2.0	2.0	2.0

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

**TABLE 4**  
**POSTEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR "EXTRAZINE" II 4L ON CORN**  
**"BLADEx", "CONQUEST", "EXTRAZINE" OR "EXTRAZINE" II USED IN PRIOR APPLICATION**

Soil Texture Description	Quarts of EXTRAZINE II 4L			
	Percent Organic Matter In Soil*			
	Less Than 1%	1%	2%	Over 2%
Sand, Loamy sand	DO NOT USE	DO NOT USE	1.4	1.4
Sandy loam	DO NOT USE	DO NOT USE	1.6	2.0
Loam, Silt loam, Silt	DO NOT USE	1.4	2.0	2.0
All other textures	DO NOT USE	1.8	2.0	2.0

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





## POSTEMERGENCE

Under warm, sunny, dry conditions of low humidity and the absence of dew formation at night, EXTRAZINE II 4L may be applied postemergence on field corn only. Do not use a surfactant, crop oil, or any other adjuvant. Addition of a surfactant, EV oil, or fertilizer solution is not recommended because moderate to severe injury, including stand loss, may occur.

Postemergence application must be made before corn reaches 12 inches in height, or before fifth leaf is visible.

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, stunting or stand loss may result from this treatment, particularly if high rainfall or cold, adverse growing conditions occur after application.

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

### EXTRAZINE II 4L Applied Alone

Use EXTRAZINE II 4L at the proper rate for the soil texture and organic matter shown in Table 3 or 4. Use rates shown in Table 3 if BLADDEX, CONQUEST, EXTRAZINE or EXTRAZINE II has not been applied to the soil this season. Use rates shown in Table 4 if BLADDEX, CONQUEST, EXTRAZINE 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 or if corn exceeds 12 inches in height. Apply in water only. Do not spray emerged corn plants in a liquid fertilizer carrier or in tank mix combinations with EC formulation herbicides.

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

## SWEET CORN

EXTRAZINE II 4L may be applied preemergence or preplant incorporated for the control of annual grasses and broadleaf weeds in sweet corn.

**NOTE:** EXTRAZINE II 4L 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 II 4L treatments just before, at or after planting but before crop has emerged. Avoid removal of treated soil from seedrow

prior to or during the planting operation. Do not apply postemergence to sweet corn.

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

If a EXTRAZINE II 4L mixture is to be incorporated, except as noted, single or two pass incorporation is acceptable. Care should be taken to incorporate the EXTRAZINE II 4L 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) Other crops may be planted 18 months after application.

### EXTRAZINE II 4L Alone

Apply EXTRAZINE II 4L at the proper rate for soil texture and organic matter indicated in Table 5.

### EXTRAZINE II 4L plus LASSO 4EC

Use EXTRAZINE II 4L at the proper rate for the soil texture and organic matter shown in Table 6 plus 2 quarts per acre of LASSO (Use 2.5 quarts LASSO on clay soils containing 5 percent organic matter and over.)

### EXTRAZINE II 4L plus SUTAN+ 6.7E, GENATE PLUS or ERADICANE 6.7E

Do not use combinations with SUTAN+, GENATE PLUS or ERADICANE in New Jersey.

Use EXTRAZINE II 4L at the proper rate for the soil texture and organic matter shown in Table 6 plus 1 quart per acre of SUTAN+, GENATE PLUS or ERADICANE for control of many annual grasses and broadleaf weeds. (Use 2.4 quarts of SUTAN+ or ERADICANE on loam soils containing 5 percent or more organic matter, and clay loams and clays containing 4 percent or more organic matter.) Do not use on sands and loamy sands having less than 1 percent organic matter nor on the light sandy soils of eastern coastal states. Do not use on corn grown for seed.

Apply before planting. Incorporate the mixture immediately upon application using power-driven cultivation equipment set for 2-3 inch depth, or tandem disc set to cut about 4 inches deep while operating at 4-6 mph. For thorough mixing, disc in two directions (cross disc), and follow with a harrow, drag, or other leveling device. Prior to the second discing,

**TABLE 5  
PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR "EXTRAZINE" II 4L APPLIED ALONE ON SWEET CORN**

Soil Texture Description	Quarts of EXTRAZINE II 4L					
	Percent Organic Matter in Soil*					
	Less than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	DO NOT USE	1.2	1.5	2.0	2.4	3.3
Sandy loam	DO NOT USE	1.5	2.0	2.4	3.1	4.1
Loam, Silt loam, Silt	DO NOT USE	2.0	2.4	3.1	3.8	4.5
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	2.4	2.9	3.8	4.5	5.0
Sandy clay, Silty clay, Clay	DO NOT USE	2.9	4.1	4.5	5.0	5.25
Peat or Muck	NOT RECOMMENDED					

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

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**TABLE 6**  
**PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR "EXTRAZINE" II 4L USED IN TANK MIX COMBINATIONS WITH "LASSO", "SUTAN+", "GENATE PLUS", "ERADICANE" OR "DUAL" ON SWEET CORN**

Soil Texture Description	Quarts of EXTRAZINE II 4L					
	Percent Organic Matter in Soil*					
	Less than 1%	1%	2%	3%	4%	5% & Over
Sand, Loamy sand	DO NOT USE	0.8	1.3	1.5	1.6	2.0
Sandy loam	DO NOT USE	1.2	1.5	1.7	2.0	2.2
Loam, Silt loam, Silt	DO NOT USE	1.5	1.8	2.0	2.2	2.7
Sandy clay loam, Clay loam, Silty clay loam	DO NOT USE	1.8	2.0	2.2	2.7	2.9
Sandy clay, Silty clay loam	DO NOT USE	2.0	2.5	2.7	2.9	3.1
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.

readjust the disc to prevent cutting deeper than 4 inches. EXTRAZINE II 4L may be applied preemergence as an overlay over previously 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 II 4L plus DUAL 8E**

Use EXTRAZINE II 4L at the proper rate for soil texture and organic matter shown in Table 6. Use DUAL as follows:

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

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 additional information on rotational crops.

**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.

**Product 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:** 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.

**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 direction 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 STATED ABOVE

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