

167 D.3
P. 1115
201 40

ACCEPTED
MAR 3 0 1986
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 201-428

EXTRAZINE® 210DF HERBICIDE

EXTRAZINE 210DF is a water dispersible granule.

	<u>BY WEIGHT</u>
ACTIVE INGREDIENTS	
2-[[4-chloro-6-(ethylamino)-s-triazin-2-yl]amino]-2-methylpropionitrile	60%
Atrazine, 2-chloro-4-(ethylamino-6-(isopropylamino)-s-triazine	28.5%
Related compound	1.5%
INERT INGREDIENTS	10%
TOTAL	<u>100.0%</u>

NOTE CONDITIONS OF SALE AND WARRANTY BEFORE OPENING THE CONTAINER.
IF THEY ARE NOT ACCEPTABLE, RETURN UNOPENED PRODUCT.

KEEP OUT OF REACH OF CHILDREN
WARNING
STATEMENT OF PRACTICAL TREATMENT

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

IF IN EYES, flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN, wash 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.

See additional precautions inside.

AVISO
PRECAUCION AL USUARIO

Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente.

EPA Reg. No.

EPA Est. No.

Shell Chemical Company
A Division of Shell Oil Company
Agricultural Chemicals
Houston, TX 77001

PRECAUTIONARY STATEMENTS
HAZARD TO HUMANS AND DOMESTIC ANIMALS
WARNING

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 determined to cause birth defects in laboratory animals. 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 rubber gloves extending above the wrist, long trousers and long-sleeved clothing when mixing or loading or when adjusting, repairing or cleaning equipment. Remove contaminated clothing and wash before reuse. Heavily contaminated clothing should be taken off immediately and incinerated or burned, if allowed by state and local authorities, or disposed of in a sanitary landfill and not laundered.

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

Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of wastes. In case of significant spill, call CHEMTREC 800-424-9300 or (713) 473-9461.

EXTRAZINE is a pesticide which can move (seep or travel) through soil and can contaminate groundwater which may be used as drinking water. EXTRAZINE has been found in groundwater as a result of agricultural use. Users are advised not to apply EXTRAZINE 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.

DIRECTIONS FOR USE

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

FOR END USE ONLY. DO NOT REPACKAGE OR REFORMULATE WITHOUT MANUFACTURER'S WRITTEN APPROVAL.

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 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.

CONDITIONS OF SALE AND WARRANTY

SHELL AND THE SELLER OFFER THIS PRODUCT, AND THE BUYER AND USER ACCEPT THIS PRODUCT, ONLY UNDER THE FOLLOWING AGREED CONDITIONS OF SALE AND WARRANTY: The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to take into account all variables and to eliminate all risks associated with its use. Injury or damage may result because of conditions which are beyond the control of Shell or the seller, including soil texture, organic matter content of soil, weather, presence of other materials, and the manner of use or application. Shell warrants only that this product conforms to the chemical description on the label and is believed to be reasonably fit for the purposes referred to in the Directions for Use when used as directed under normal conditions. SHELL MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. Any variation or exception from this warranty must be in writing and signed by an authorized Shell representative.

LIMITATION OF LIABILITY

Shell's liability, whether or not based on negligence, breach of expressed or implied warranty, strict liability, or any other legal cause, is limited to the cost of this product. In no case shall Shell or the Seller be liable for consequential, incidental, or indirect damages, such as loss of crops, resulting from the use or handling of this product.

GENERAL INFORMATION

EXTRAZINE 210DF Herbicide is a selective herbicide for the control of annual grasses and broadleaved weeds in field corn, popcorn, sweet corn, and fallow cropland.

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

Where surfactants or emulsifiable vegetable oils are added to EXTRAZINE 210DF for over the top of corn postemergence applications, use on field corn only.

As a preemergence herbicide, EXTRAZINE 210DF 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 wet the top 1-1/2 to 2 inches of soil or make the soil too wet to cultivate; for most soils, 1/2 to 3/4 inches of moisture is sufficient. A rotary hoeing or shallow cultivation is recommended if a rainfall or sprinkler irrigation has not occurred within about ten days after application of EXTRAZINE 210DF. 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, a shallow cultivation, or a postemergence herbicide treatment may be of benefit under these circumstances. When applied as a postemergence herbicide, EXTRAZINE 210DF is also active through foliage, as well as through the roots.

EXTRAZINE 210DF is not effective when used preemergence on peat or muck soils. Do not use EXTRAZINE 210DF alone on sands or loamy sands (soils consisting of more than 70 percent sand) containing less than 1 percent 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 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) 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 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.

APPLICATION DIRECTIONS
GENERAL MIXING AND SPRAYING INSTRUCTIONS

Use sufficient agitation to ensure that the EXTRAZINE 210DF is completely dispersed (dissolved) and in uniform suspension prior to application or tank mixing with other formulations.

The following general mixing instructions are recommended when using this or any other dry flowable formulation.

I. General

1. Unless otherwise specified, use at least 15 gallons of water per acre for all applications with ground equipment. For aerial application, apply a minimum of 4 gallons of water per acre.
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 or sorghum. 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.
5. Fill tank 1/4 full with carrier. Start and maintain consistent agitation through all mixing and spraying procedures. Make sure that the agitation system is working properly and creates a rippling or rolling action on the liquid surface.
6. Slowly add the dry flowable (DF) to the tank or inductor.
7. Fill tank to 75 percent capacity with carrier. Filling and bypass lines should be kept below liquid surface. Increase tank agitation if necessary to maintain surface action.
8. When desired, appropriate emulsifiable oil, oil concentrate, or other tank mix formulations should be added at this time. Preslurry 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 remix all products and check for complete resuspension prior to application.
11. Empty tank as completely as possible before refilling to prevent buildup of oil or emulsifiable 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 emulsifiable formulation has been used either alone or in tank mix combinations with other pesticide formulations, even if no obvious problems have been encountered. This precaution will ensure a clean sprayer and continued trouble-free operation.

II. Tank Mix Compatibility Evaluation Procedure

- 1. Add 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 tank mix compatibility agent (1/4 teaspoon/pint = 2 pints/100 gallons of carrier) to the jar marked "with," cap the jar and shake gently for 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, preslurry these formulations in water prior to their addition to the liquid fertilizer and proceed with the test. The following chart has been provided to assist in selecting the appropriate EXTRAZINE 210DF use rate for this evaluation. If more than one herbicide is to be used in the tank mixture, each should be added separately as follows: water solubles first, wettable powders or dry flowables second, liquid flowables third, and emulsifiable concentrate or oil formulations last, with each jar capped and gently shaken for 5 to 10 seconds for each addition.

Gallons Liquid Carrier per acre	15	20	25	30	40
Teaspoons of EXTRAZINE 210DF per Pint of Liquid Carrier	1-1/2	1-1/4	1	3/4	1/2

This chart is based on 1 pound of EXTRAZINE 210DF (0.9 pounds active ingredient) per acre in the indicated carrier volumes. Intended field use rates are achieved by varying the amount of EXTRAZINE 210DF; i.e., for a field use rate of 2.5 pounds of EXTRAZINE 210DF in 15 gallons of carrier per acre, add 3.75 teaspoons of EXTRAZINE to the quart jars containing 1 pint of carrier. Calculation: 2.5 pounds of EXTRAZINE 210DF/15 gallons of carrier per acre = 2.5×1.5 or 3.75 teaspoons of EXTRAZINE 210DF 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 remix uniformly.
 - b. Screen/nozzle plugging lumps do not disperse.
 - c. Precipitate does not resuspend 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 without a compatibility agent.
6. If problems 4.a. or 4.b. occur in the jar marked "without," but do not occur in the jar marked "with," the compatibility agent should be used.
7. If problems 4.a. or 4.b. are seen in both jars, then the herbicides and carrier mixture are incompatible and should not be used in the same spray tank. Alternatively, a different tank mix compatibility agent can be evaluated.
8. If problems 4.c or 4.d occur in the jar marked "without," but do not occur in the jar marked "with," the compatibility agent should be used unless constant, thorough agitation can be maintained and immediate clean-out of spray system is performed.
9. If problems 4.c. and 4.d. are seen in the jar marked "with," the user proceeds with mixing and application at his own risk should agitation in the system be insufficient or curtailed.
10. Those mixtures defined as compatible in this test should then be mixed for use as indicated in Steps 1 through 12 of the general mixing instructions listed above.

III. Application Equipment

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

Application in Center Pivot Sprinkler Irrigation Water (For use in Midwest and Plains States only)

EXTRAZINE 210DF alone or in a tank-mix combination with Lasso 4 EC, may be applied in center pivot sprinkler irrigation water. Apply anytime after planting, but prior to crop emergence. Pre-mix the herbicide(s) in water to form a slurry and inject at a carefully calibrated rate into the irrigation water during the entire period of the run. Mix as directed for a spray application. Provide good agitation for the herbicide mixture throughout the application.

Select the correct application rate of EXTRAZINE 210DF from the rate tables listed on this label.

Example:

A center pivot sprinkler that is 1320 feet long (1/4 mile) will irrigate 125.7 acres. A sandy loam soil containing 2 percent organic matter will require 2.3 pounds of EXTRAZINE 210DF per acre.

$125.7 \text{ A} \times 2.3 \text{ lbs.} = 289.1 \text{ lbs. EXTRAZINE 210DF.}$

Mixing tank size 600 gallons. Sprinkler takes 20 hours to apply 1/2 inch of water to the complete circle; inject rate =

$$\frac{600}{20} = 30 \text{ gallons/hour or } 0.5 \text{ gallons/minute}$$

Calibrate injection pump to deliver herbicide mix into the irrigation system at the rate of 30 gallons per hour or 0.5 gallons per minute. Add 289.1 pounds of EXTRAZINE 210DF to the tank.

For tank-mix combinations, select the correct dosage rate and follow the same procedures outlined above for each herbicide component.

Apply in 1/2 to 1 acre inch of water. Use this method of application only with irrigation systems designed for uniform application of water.

Additional Use Precautions

1. Apply product or tank mixes only through center pivot irrigation systems containing anti-siphon and check valves which will prevent water source contamination and overflow of the slurry tank and containing interlocking controls between metering device and the water pump to ensure simultaneous shut-off.
2. Inject the herbicide mix with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing.
3. Application of more than label recommended quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness.
4. Do not apply when wind speed favors drift, when system connectors leak, when nozzles do not provide uniform distribution, or when lines containing the product must be drained and dismantled.
5. Greater accuracy in calibration and distribution will be achieved by injecting a large volume or more dilute slurry per hour.
6. Where sprinkler distribution patterns do not overlay sufficiently, unacceptable weed control may result. Where sprinkler distribution patterns overlay excessively, crop injury may result.
7. Make sure the system is designed to shut off the herbicide injection if the traveling sprinkler stalls or stops for any reason, even if the water pump does not shut off.

CORN

WEEDS CONTROLLED BY EXTRAZINE 210DF ALONE AND
IN COMBINATION WITH OTHER HERBICIDES ON CORN

Grasses

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

Broadleaves

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

¹Under 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.

²The 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 seedrow 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 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 this label.

A 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 2 inches of soil.

EXTRAZINE Applied Alone

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

TABLE 1

PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE
FOR EXTRAZINE 210DF APPLIED ALONE ON CORN

Soil Texture Description	Pounds of EXTRAZINE 210DF Percent Organic Matter in Soil*					
	Less Than 1%	1%	2%	3%	4%	5% & over
Sand, Loamy Sand	DO NOT USE	1.3	1.7	2.3	2.7	3.5
Sandy Loam	1.3	1.7	2.3	2.7	3.5	4.4
Loam, Silt Loam, Silt	1.7	2.3	3.1	3.5	4.4	4.9
Sandy Clay Loam, Clay Loam, Silty Clay Loam	2.3	3.1	3.5	4.4	4.9	5.4
Sandy Clay, Silty Clay, Clay	3.1	3.5	4.4	4.9	5.4	5.8
Peat or Muck	NOT RECOMMENDED					

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

/ 100 00

EXTRAZINE COMBINATIONS

EXTRAZINE plus Lasso 4 EC

Use EXTRAZINE 210DF 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 plus Sutan+ 6.7E/Genate Plus, or EradicaneTM 6.7E

Use EXTRAZINE 210DF 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, 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 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 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 210DF 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 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 PLUS DUAL 8E

Use EXTRAZINE 210DF at the proper rate for soil texture and organic matter shown in Table 2. Use Dual as follows:

<u>SOIL TEXTURE</u>	<u>BROADCAST RATE PER ACRE</u>
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 precautions on rotational crops.

TABLE 2

PREEMERGENCE BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 210DF
USED IN TANK-MIX COMBINATIONS WITH LASSO, SUTAN+/GENATE PLUS, ERADICANE,
OR DUAL ON CORN

Soil Texture Description	POUNDS OF EXTRAZINE 210DF					
	Percent Organic Matter in Soil*					
	Less Than 1%	1%	2%	3%	4%	5% & over
Sand, Loamy Sand	0.7**	0.9	1.3	1.6	1.8	2.2
Sandy Loam	0.9	1.3	1.6	1.8	2.2	2.4
Loam, Silt Loam, Silt	1.3	1.6	1.8	2.2	2.4	2.9
Sandy Clay Loam, Clay Loam, Silty Clay Loam	1.6	2.0	2.2	2.4	2.9	3.1
Sandy Clay, Silty Clay, Clay	2.0	2.2	2.7	2.9	3.1	3.3
Peat or Muck	NOT RECOMMENDED					

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

**Do not use in the Atlantic Coastal Plain.

CONSERVATION TILLAGE WEED CONTROL

Early Preplant (EPP)

[Prior to planting weed control for land going into production of corn.]

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.

Apply EXTRAZINE 210DF 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.

Where broadleaf weeds are present, add 2,4-D LV Ester at 1-1/3 to 2 pints per acre (6 pounds/gallon) or 2 to 3 pints per acre (4 pounds/gallon) plus X-77 surfactant at 1 quart/100 gallons of diluted spray, or other suitable surfactant at its recommended rate. When 2,4-D Ester is tank mixed with EXTRAZINE as previously described, these additional weeds will be controlled: Buckwheat, Dandelion, Dock, Maretail, Pennycress, Prickly lettuce, and Tansy mustard. If existing annual weeds exceed 3 inches in height, add 1 to 2 pints per acre of paraquat or 2 pints per acre of Roundup to the above mixture. Well-established weeds over 6 inches tall may not be well controlled. Use at least 25 gallons per acre of spray mixture by ground rig or 5 to 10 gallons per acre for aerial application.

Depending upon weather conditions following the EPP application, a post-emergence EXTRAZINE or BLADDEX Herbicide treatment, or some other herbicide treatment, may be necessary at or after planting to provide additional length of weed control. If desired, 1-1/2 to 2 pints per acre of Dual or 2 quarts per acre 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 the label.

At Planting

EXTRAZINE 210DF 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 210DF 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 Tables 1 or 2 should be increased by 25 percent. Add 1/2 to 1 pint per acre of 2,4-D Low Volatile 6-pound Ester (0.75 to 1.5 pint per acre 2,4-D LV 4-pound Ester). Add the 2,4-D LV to the spray tank last. Refer to the EPP section above for additional broadleaf weeds controlled with an EXTRAZINE/2,4-D Ester tank mix treatment. Use a minimum of 25 gallons per acre 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 as they help aid in the burndown of existing weeds. Add Ortho X-77™ surfactant at 1 to 2 quarts per 100 gallons of diluted spray, or other suitable surfactant at its recommended rate. If water is used as a carrier, crop oil concentrate may be used as a surfactant. Apply before weeds exceed 3 inches in height. For control of existing alfalfa, add 1/3 to 1/2 pints per acre 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 CL to the tank-mix. Use 2 pints per acre of Paraquat CL in combination with EXTRAZINE as described above in this section, except the 2,4-D LV may be omitted, if desired. Do not apply Paraquat CL in suspension-type liquid fertilizer.

POSTEMERGENCE

EXTRAZINE Applied Alone

Use EXTRAZINE 210DF at the proper rate for the soil texture and organic matter shown in Tables 3 or 3A. Use rates shown in Table 3 if EXTRAZINE or BLADEX has not been applied to the soil this season. Use rates shown in Table 3A if EXTRAZINE or BLADEX 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.

DO NOT APPLY THIS TREATMENT UNDER COLD, WET WEATHER CONDITIONS, OR TO WEATHER-STRESSED OR STORM-DAMAGED CORN. 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 use on corn grown for seed.

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

TABLE 3

POSTEMERGENCE BROADCAST APPLICATION RATES
 PER ACRE FOR EXTRAZINE 210DF ON CORN
 NO PRIOR EXTRAZINE OR BLADEX APPLICATION

Soil Texture	POUNDS OF EXTRAZINE 210DF Percent Organic Matter in Soil*			
	Less than 1%	1%	2%	Over 2%
Sand, Loamy Sand	DO NOT USE	1.3	1.8	2.2
Sandy Loam	1.3	1.8	2.2	2.2
Loam, Silt 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 3A

POSTEMERGENCE BROADCAST APPLICATION RATES
PER ACRE FOR EXTRAZINE 210DF ON CORN
EXTRAZINE OR BLADEX USED IN PRIOR APPLICATION

Soil Texture	POUNDS OF EXTRAZINE 210DF			
	Percent Organic Matter in Soil*			
	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.

FALLOW CROPLANDWeeds Controlled by EXTRAZINE 210DF Alone and in Tank-Mix CombinationsGrasses

Annual (Italian) ryegrass
 Barnyardgrass*
 Crabgrass
 Cheatgrass
 Downy brome
 Green foxtail

Yellow foxtail
 Indian lovegrass
 (Stinkgrass)
 Volunteer wheat
 Witchgrass
 Wild oat*

Broadleaves

Cocklebur*
 Common chickweed
 Dog fennel
 False flax
 Henbit
 Horseweed (marestail)
 Kochia
 Lambsquarters
 Pennycress
 Pigweed*
 Prickly lettuce
 Prostrate knotweed

Prostrate spurge
 Purslane
 Russian thistle
 Shepherdspurse
 Smartweed
 (Pennsylvania)
 Sunflower* (wild)
 Purple mustard
 Tansy mustard
 Tumble mustard
 Wild radish
 Wild buckwheat*

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

* 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 210DF may be used alone or in tank-mix combinations for the control of certain annual weeds during a fallow program.

EXTRAZINE 210DF should be used in tank-mix combination with Roundup, Paraquat CL, 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 floodtype nozzles and at least 25 gals./A. of carrier, unless Roundup is used. Refer to "EXTRAZINE combination with Roundup" in this section of the label for specific instructions.

EXTRAZINE 210DF Alone

EXTRAZINE 210DF 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 for a particular location from Table 4. Add 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 subsoil outcroppings because of possible atrazine carry-over damage to the succeeding crop.

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

TABLE 4

BROADCAST APPLICATION RATES PER ACRE FOR EXTRAZINE 210DF
ON FALLOW CROPLAND*

LOCATION/TREATMENT	LBS/ACRE	EXTRAZINE 210DF
<u>FALL APPLICATION FOR WINTER WHEAT</u>		
Kansas, Southern Nebraska, Oklahoma, Colorado East Slope between Highway I-76 and State Highway 96		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 90DF or EXTRAZINE 210DF 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 with EXTRAZINE as previously described in this section. Apply the recommended rates in at least 2¹/₂ gallons of spray mixture per acre by ground rig or 5 to 10 gallons per acre for aerial application. Use higher volumes and the high rates of paraquat when weed growth is heavy or when dry weather conditions prevail. Add X-77 surfactant at 1 quart per 100 gallons of diluted spray.

EXTRAZINE Combinations With 2,4-D Low Volatile Ester

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). 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 LV 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.

BLADEX® - Trademark of Shell Chemical Company

Dual™ - Trademark of Ciba-Geigy Corporation

Eradicane™, Sutan+™ - Trademarks of Stauffer Chemical Company

Roundup™, Lasso™ - Trademarks of Monsanto Company

Ortho X-77™ - Trademark of Chevron Chemical Company

Genate Plus™ - Trademark of PPG Industries, Inc.