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19713-513

11/3/99

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
19713-513

Date of Issuance:
NOV - 3 1999

NOTICE OF PESTICIDE:

Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance:
Conditional

Name of Pesticide Product:
Drexel Acetochlor Plus
Atrazine

Name and Address of Registrant (include ZIP Code):

Drexel Chemical Company
P.O. Box 13327
Memphis, TN 38113-0327

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5), 3(g) or 4 when the Agency requires all registrants of similar products to submit such data.
2. Add the phrase "EPA Registration No. 19713-513" before you release the product for shipment.
3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of this product constitutes acceptance of these conditions.

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

Signature of Approving Official:

Date:

11-3-99

The Agency has recently revised its recommended First Aid statements for pesticide products and intends to issue a PR Notice announcing the changes in the near future. In the interim we are encouraging registrants to begin using the new statements. The new statements were developed as part of the Consumer Labeling Initiative in close cooperation with poison control center personnel and other medical experts. While it is not mandatory that you revise your label at this time, you are strongly encouraged to substitute the revised statements (below) for those statements currently on the label at your next label printing:

FIRST AID

If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
If on skin:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. vkw

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RESTRICTED USE PESTICIDE

(GROUND AND SURFACE WATER CONCERNS)

For retail sale 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.



ACCEPTED

NOV - 3 1999

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 19713-513

Acetochlor Plus Atrazine

Herbicide

A pre-emergence herbicide for control of Annual grass and Broadleaf weeds in Field corn, Production seed corn, Popcorn and Silage corn.

ACTIVE INGREDIENTS:

Acetochlor (2-chloro-2'-methyl-6'-ethyl-N-ethoxymethylacetanilide)	24.8%
Atrazine [2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine] and related triazines	16.6%

OTHER INGREDIENTS: 58.6%

TOTAL: 100.0%

*This product contains 2.4 pounds of Acetochlor and 1.6 pounds of Atrazine active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See FIRST AID Below

SHAKE WELL BEFORE USING

EPA Reg. No. 19713-

EPA Est. No.

Net Contents: _____

FIRST AID

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF IN EYES: Flush with plenty of water. Call a physician if irritation persists.

PRECAUTIONARY STATEMENTS

Hazards To Humans And Domestic Animals

CAUTION: Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wear long-sleeved shirt and long pants, shoes plus socks and waterproof gloves. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants, waterproof gloves and shoes plus socks.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers used closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Atrazine leaches readily and accepted label rates have been found to result in contamination of water supplies by way of groundwater. Therefore, users are advised to avoid use of atrazine in well-drained soils, particularly in areas having high groundwater tables.

Groundwater contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters. This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flames.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers' on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted entry interval (REI) and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

(Continued)



Manufactured By:

Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

AGRICULTURAL USE REQUIREMENTS (Continued)

Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil and water, wear: Coveralls over long-sleeved shirt and long pants, socks plus chemical resistant footwear and waterproof gloves.

GENERAL INFORMATION

For use only on Field corn, Popcorn, Production seed corn, and Silage corn. Corn in this label refers to all four types: Field corn, Popcorn, Production seed corn and Silage corn.

This product is a unique combination of the herbicides acetochlor and atrazine plus the antidote or safener dichlormid. While the acetochlor provides weed control, the dichlormid safens Corn against herbicide injury. This product may be applied to the surface or incorporated into the top 1- to 2-inch layer of soil. It is recommended for control alone or in tank mix combinations as indicated for the weeds listed in the "TARGET WEEDS" section of these use directions. This product controls weeds by interfering with normal germination and seedling development. This product does not control established or germinated weeds present at application.

USE RESTRICTIONS

Do not apply to the following soils if groundwater depth is 30 feet or less: Sand with less than 3% organic matter; Loamy sand with less than 2% organic matter; or Sandy loam with less than 1% organic matter. This product may not be mixed/loaded or used within 50 feet of any wells, including abandoned wells, drainage wells or sink holes.

Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operation containment.

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 by ground within 55 feet of the points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or setback from runoff entry points must be planted to crop, seeded with grass or other suitable crop.

Tile-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes and tile outlets in terraced fields, one of the following options may be used:

1. Do not apply this product within 66 feet of standpipes in tile-outletted terraced fields.
2. Apply this product to the entire tile-outletted terraced field and immediately incorporate it to a depth of 2 to 3 inches in the entire tile-outletted terraced field.
3. Apply this product to the entire tile-outletted terraced field under a no-till practice only when high crop residue management practices are used. High crop residue management practice is described as a crop management practice where little or no crop residue is removed from the field during or after crop harvest.

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

Do not use flood irrigation to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

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- Avoid treating powdery dry or light Sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
 - Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow-covered soils.
 - Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least ½ inch of rainfall has occurred between application and the first irrigation.

Do not apply this product using aerial application equipment.

Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:

- Use low-pressure application equipment capable of producing a large droplet spray.
- Do not use nozzles that product fine droplet spray.
- Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
- Keep ground-driven spray boom as low as possible above the target surface.
- Make application when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid application when gusts approach 15 mph.

Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

GENERAL USE PRECAUTIONS

Read all label directions before using. This product is intended for pre-plant, pre-emergence or early post-emergence use in Corn. Failure to strictly follow label directions may result in exceeding the maximum annual atrazine use rates as stipulated by the Environmental Protection Agency.

On highly erodible soils, as defined by the Soil Conservation Service (SCS), if conservation tillage is utilized ($\geq 30\%$ plant residue), the maximum rate of atrazine is 2 pounds of active ingredient per acre. If plant residue is $< 30\%$, the maximum rate of atrazine is 1.6 pounds of active ingredient per acre. On soils not highly erodible, the maximum rate of atrazine is 2 pounds of active ingredient per acre. The maximum application rate for Corn is 2.5 pounds of atrazine per acre per calendar year. Where there are State/Local requirements regarding atrazine use (including lower maximum rates and/or higher setbacks) which are different from the label, the more restrictive/protective requirements apply.

This product contains atrazine and thus may not control weeds that are known or suspected to be triazine resistant.

Do not use this product on any crop other than Field corn, Popcorn, Production seed corn and Silage corn.

This product should not be used on corn seed stock such as Breeders, Foundation or Increase.

This product can be used on production seed Corn.

Do not contaminate irrigation water used for crops other than Corn or water used for domestic purposes.

Do not apply this product before pre-irrigation in irrigated areas.

Do not allow this product to contaminate feed or food.

This product should not be stored near seeds, fertilizers or foodstuffs.

All containers of this product should be kept tightly closed when not in use.

Applied according to directions and under normal growing conditions, this product will not harm the treated crop. During germination and early stages of growth, extended period of unusually cold and wet or hot and dry weather, insect or plant disease attack, carryover pesticide residues, the use of certain soil-applied systemic insecticides, improperly placed fertilizers or soil insecticides may create abnormal conditions that weaken crop seedlings. This product is used under these abnormal conditions could result in crop injury.

Do not apply this product after June 10, unless only Corn will be planted the following year.

ROTATIONAL CROPS: Corn, Sorghum and Soybeans may be planted the Spring following application. Tobacco may be planted the Spring following application. Wheat may be planted 15 months following treatment. Because of atrazine carryover, injury may occur to Tobacco or Wheat.

Do not rotate to crops other than Corn, Sorghum, Soybeans, Tobacco or Wheat the year following application of this product.

Because of atrazine carryover, injury may occur to Soybeans the year following Corn when planted in North Central and North West IA, South Central and Southwest MN, Northern NE and Southeast SD on soils having a calcareous surface layer.

Precautions: Following many years of continuous use of atrazine and chemically related products, biotypes of some of the weeds listed above have been reported which cannot be effectively controlled by atrazine and related herbicides. Where this is known or suspected and weeds

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controlled by atrazine are expected to be present along with resistant biotypes, it is recommended that atrazine be used in combinations or in sequence with other registered herbicides which are not triazines. If only resistant biotypes are expected to be present, use a registered non-triazine herbicide.

APPLICATION DIRECTIONS—CORN CARRIERS

Liquids: Either water or liquid fertilizers such as solutions, slurries or suspensions may be used as liquid carriers. If fluid fertilizers are used, a physical compatibility with these must be done before combining in the spray tank. See "APPENDIX I" for details of the compatibility testing procedure. Even if this product is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

Dry Bulk Fertilizer: This product may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread. See "APPENDIX I" for details including which fertilizers are compatible.

ADDING TO SPRAY TANK

The spray tank must be clean, thoroughly rinsed and decontaminated before adding either this product alone or with tank mix combinations. If water is used as the carrier, use clean water.

Used Alone: When this product is used alone, add the recommended amount to the spray tank when the tank is half filled, then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Tank Mixed: If a tank mixture is used, it is recommended that a compatibility test be done before actual tank mixing. See "APPENDIX I" for details on the procedure for such a test.

Once compatibility is confirmed for the tank mix, fill the tank half full. Start and continue agitation throughout mixing. All return lines to the spray tank must discharge below the liquid level. Add components in the following order of formulation:

- If wettable powder or dry flowable formulation is used, make a slurry with water and add it slowly through the screen into the tank. Agitate during the procedure.
- If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when the flowable is diluted with water before adding to the tank.
- Add this product next.
- Add Gramoxone® Extra, Touchdown®, 2,4-D and/or Warrior® and a non-ionic surfactant last, if needed.
- Complete filling the sprayer tank and continue agitation.
- Batches should be mixed and applied the same day.

VOLUME

Liquid: Use a minimum of 10 gallons per acre in broadcast boom equipment for ground applications.

Dry Bulk Fertilizer: Use a minimum of 200 pounds of dry bulk fertilizer per acre. See "APPENDIX II" for more details.

PRESSURE

If liquid carriers are used, the pressure at the nozzle should be 15 to 40 psi to ensure good distribution in the spray pattern. Use appropriate nozzles and 50-mesh or coarser screens, if needed. Maintain agitation to ensure the mixture is suspended in the spray tank.

APPLICATION TIMING AND METHODS

In reduced or no-till systems, a burndown herbicide such as Gramoxone Extra, Touchdown or 2,4-D may be tank mixed with this product if emerged weeds are present at the time of application.

Early Pre-plant: On Medium and Fine-textured soils, this product may be applied up to 40 days prior to planting.

Pre-plant Incorporation: This product and certain tank mixes may be mechanically incorporated in the top 2 inches of the soil with field cultivators, discs or spring tooth harrows at any time within 14 days prior to planting. Improper incorporation, excessive crop residues or poor soil tillage may result in erratic, streaked or otherwise unsatisfactory weed control. Do not mix deeper than 2 inches into the soil and avoid moving or shaping soil after incorporation.

Sprinkler Irrigation: DO NOT APPLY THIS PRODUCT BY SPRINKLER IRRIGATION. Use a sprinkler system only to incorporate this product after application. After this product has been applied, a sprinkler irrigation system set to deliver ¼ to ¾ inch of water per acre may be used to incorporate the product. Using more than ¾ inch of water could result in reduced performance. On Sandy soil low in organic matter, use no more than ½ inch of water. Do not use flood irrigation to apply or incorporate this product.

Pre-emergence Surface: This product and certain tank mixes may be applied to the soil surface as a broadcast or banded application. Precipitation or sprinkler irrigation is necessary to bring this product into contact with germinating seeds. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe or similar device, to incorporate the herbicide. Do not remove this product from the weed control zone or dilute it with untreated soil. The device used should be run at a shallow depth to prevent disturbing the Corn seed.

Banding Pre-emergence: This product and certain tank mixtures may be applied in a 10- to 14-inch band after Corn planting but prior to Corn emergence. If rain or sprinkler irrigation does not occur within 7 days after application, weed control may be improved by using a rotary hoe, or similar device, to incorporate the herbicide. Do not remove this product from the weed control zone or dilute it with untreated soil. Do not disturb the germinating Corn.

Early Post-emergence: This product may be used early post-emergence (up to 11 inches tall) in Corn. Applications must be made prior to weed seedling emergence or in a tank mixture that controls the emerged weeds. Read and follow restrictions and directions on tank mix product labels.

PLANTING

Planting should be done as close to the time of application of this product as possible. This allows this product to provide effective weed control during the time it is most critical in the production of Corn.

CULTIVATION

Cultivation should be delayed as long as possible. Should weeds develop, a shallow cultivation or rotary hoeing will generally result in improved weed control. If this product was incorporated, cultivate less than ½ the depth of incorporation.

If cultivation is necessary due to soil crusting, compaction or escaped weeds, adjust equipment to run shallow and minimize soil movement. This will decrease the possibility of diluting or moving the herbicide from the weed control zone.

SOIL TEXTURE AND ORGANIC MATTER

The soils are grouped into three classes, Coarse, Medium and Fine. Once the soil type has been determined, the texture group can be found in "TABLE 1".

TABLE 1		
Coarse	Medium	Fine
Sand	Loam	Silty clay loam
Loamy sand	Silt	Sandy clay loam
Sandy loam	Silt loam	Silty clay
		Sandy clay
		Clay loam
		Clay

The soil texture and organic matter of the field on which the application is to be made must be determined prior to application. The use rate of this product is determined by a combination of these two factors.

USE RATES IN CONVENTIONAL TILLAGE SYSTEMS

The soil texture and organic matter level of the field on which this product is to be applied should be determined prior to selecting the rate from "TABLE 2".

TABLE 2		
Use rates for this product by soil texture and organic matter content in conventional tillage systems. Rates are in quarts per acre.		
Soil Texture	Soil Organic Matter Content	
	Less than 3%	3% or Greater
Coarse	2.5 to 2.7 qts.	2.7 to 3.0 qts.
Medium	2.7 to 3.3 qts.	3.0 to 3.3 qts.
Fine	3.0 to 3.5 qts.	3.0 to 5.0 qts.

These rates are for application within 14 days prior to planting. Use "TABLE 3" if no-till applications are made or the product is applied more than 2 weeks prior to planting in conventional tillage.

Organic Matter: If the organic matter content of the soil is at the lower end of the range, use the lower rates in the rate range given in "TABLE 2", if the organic matter content is at the upper end of the range, use the higher rates given in the rate range.

Weed Infestation: If the weed infestation is light, use a rate at the lower end of the rate range for the soil texture and organic matter content. If the weed infestation is heavier, use the higher rates in the rate range for the soil.

USE RATES FOR REDUCED AND NO-TILL SYSTEMS

This product may be used in reduced and no-till systems. Application can take place from up to 40 days prior to planting or after planting. The highest levels of control will be obtained when applications are made as close to the planting as possible. It is recommended that a burn down herbicide such as Gramoxone Extra, Touchdown or 2,4-D be tank mixed with this product in reduced or no-till systems if weeds are present at application.

TABLE 3¹
Use rates for this product by soil texture and application timing in reduced and no-till systems. Rates are in quarts per acre.

Soil Texture	Time Application Relative to Planting		
	Greater than 10 Days Before Planting	Less than 10 Days Before or After Planting	After Planting and/or Emergence
Coarse	Do not apply more than 14 days before planting in Coarse-textured soils	2.5 to 3.0 qts.	2.5 to 3.0 qts.
Medium	2.7 to 4.0 qts.	2.7 to 3.3 qts.	2.7 to 3.3 qts.
Fine	3.3 to 5.0 qts.	3.0 to 5.0 qts.	3.0 to 4.0 qts.

¹Rates are for single applications. This product may be split-applied. If the rate is split, apply 50% of the recommended rate up to 30 days before planting. The remaining 40% should be applied at or after planting.

BAND APPLICATIONS

For band applications, using row and band width measurements in inches, calculate the amount to be applied per acre as follows:

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

WEEDS CONTROLLED

This product applied as directed in this label will control or suppress the weeds listed in "TABLE 4". Additional weeds may be controlled with tank mixes. See the "TANK MIX COMBINATIONS" section for recommended tank mix combinations. Always consult the tank mix product labels for specific rates and use directions. Always follow the most restrictive label when tank mixing this product with another product. You may tank mix this product with any other registered Corn product as long as compatibility is verified and it is not prohibited by the other product label.

TABLE 4
Weeds controlled or partially controlled by this product at recommended use rates

Common Name	Weed Type ¹	Scientific Name	C = Control PC = Partial Control
Black nightshade	B	<i>Solanum nigrum</i>	C
Carpetweed	B	<i>Mollugo verticillata</i>	C
Cocklebur ²	B	<i>Xanthium strumarium</i>	PC
Common ragweed	B	<i>Ambrosia artemisiifolia</i>	C
Florida beggarweed	B	<i>Desmodium tortuosum</i>	C
Florida pusley	B	<i>Richardia scabra</i>	C
Galinsoga	B	<i>Galinsoga parviflora</i>	C
Giant ragweed	B	<i>Ambrosia trifida</i>	PC
Hairy nightshade	B	<i>Solanum sarrachoides</i>	C
Kochia	B	<i>Cochia scoparia</i>	PC
Jimsonweed	B	<i>Datura stramonium</i>	C
Lambsquarters	B	<i>Chenopodium album</i>	C
Morningglory	B	<i>Ipomoea</i> spp.	C
Palmer amaranth	B	<i>Amaranthus palmeri</i>	C
Prickly sida	B	<i>Sida spinosa</i>	C
Purslane, common	B	<i>Portulaca oleracea</i>	C
Redroot pigweed	B	<i>Amaranthus retroflexus</i>	C
Sicklepod	B	<i>Cassia obtusifolia</i>	C
Smartweed spp.	B	<i>Polygonum</i> spp.	C
Waterhemp, common	B	<i>Amaranthus rudis</i>	C
Waterhemp, tall	B	<i>Amaranthus tuberculatus</i>	C
Velvetleaf ³	B	<i>Abutilon theophrasti</i>	PC
Barnyardgrass	G	<i>Echinochloa crus-galli</i>	C
Broadleaf signalgrass	G	<i>Brachiaria platyphylla</i>	C ⁴
Browntop panicum	G	<i>Panicum fasciculatum</i>	C
Crabgrass	G	<i>Digitaria</i> spp.	C

(Continued)

TABLE 4 (Continued)

Common Name	Weed Type ¹	Scientific Name	C = Control PC = Partial Control
Crowfootgrass	G	<i>Dactyloctenium aegyptium</i>	C
Fall panicum	G	<i>Panicum dichotomiflorum</i>	C
Field sandbur	G	<i>Cenchrus incertus</i>	PC
Foxtail millet	G	<i>Setaria italica</i>	C
Giant foxtail	G	<i>Setaria faberii</i>	C
Goosegrass	G	<i>Eleusine indica</i>	C
Green foxtail	G	<i>Setaria viridis</i>	C
Red rice	G	<i>Oryza sativa</i>	C
Red sprangletop	G	<i>Leptochloa filiformis</i>	C
Robust foxtail (purple, white)	G	<i>Setaria</i> spp.	C
Seedling Johnsongrass	G	<i>Sorghum halepense</i>	PC
Shattercane	G	<i>Sorghum bicolor</i>	PC
Southwestern cupgrass	G	<i>Eriochloa gracilis</i>	C
Texas panicum	G	<i>Panicum texanum</i>	C ⁴
Wild proso millet	G	<i>Panicum miliaceum</i>	PC
Witchgrass	G	<i>Panicum capillare</i>	C
Woolly cupgrass	G	<i>Eriochloa villosa</i>	PC
Yellow foxtail	G	<i>Setaria glauca</i>	C
Yellow nutsedge ^{2,3}	S	<i>Cyperus esculentus</i>	C

¹B=Broadleaf, G = Grass, S= Sedge
²Yellow nutsedge requires a minimum of 3½ qts. Incorporation will improve control.
³Activity may be reduced under dry conditions or following early (more than 14 days) pre-plant applications. Sequential herbicides or additional atrazine may be needed for complete control.
⁴Best control is achieved when this product is applied within 5 days of planting and rainfall occurs shortly after application or mechanical incorporation is used to activate the herbicide. If it does not rain within 7 days, shallow cultivation will enhance activity. Excessive rainfall after application may reduce control. Under adverse weather conditions and/or heavy infestations, a cultivation or follow-up herbicide may be needed.

TANK MIX COMBINATIONS WITH THIS PRODUCT

USE OF SPRAY ADJUVANTS

This product is a pre-emergence herbicide for which spray adjuvants have little or no influence on performance. However, several herbicides used in tank mixtures with this product require use of adjuvants to aid in the burn down of emerged weeds. Use only those adjuvants to aid in the burn down of emerged weeds. Use only those adjuvants approved for agricultural crop use. Surfactants and/or low rate fertilizer (28%, 30% or 32% UAN or ammonium sulfate) adjuvants may be used with tank mixes applied pre-plant or pre-emergence to the crop.

PRE-EMERGENCE TANK MIX COMBINATIONS

Tank mix combinations may be used in either conventional, reduced or no-till systems and be applied by the same methods and at the same timings as this product unless otherwise specified in the tank mix product label. Three-way tank mixtures are allowed if not restricted by the respective product labels. Check all tank mix product labels for proper rates for 3-way tank mixes.

When tank mixing this product with atrazine, do not exceed the maximum allowable rate of atrazine in your county or state. In some atrazine management areas, atrazine is more restricted. Consult your county extension office or State university for further information.

CONVENTIONAL TILLAGE

Tank Mix Examples [*]	Rate (Max.)	Comments
Atrazine 4L	Consult State Extension or product label for maximum use rate in area	• Long-growing season areas • High rainfall areas • Heavy broadleaf weed pressure
Bladex [®] 4L/ Extrazine [®] II	See label	• High pH soils • Atrazine carryover areas • When injury to rotated soybeans is a concern • Field and Silage corn only

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CONVENTIONAL TILLAGE (Continued)

Tank Mix Examples*	Rate (Max.)	Comments
Lorox® DF	See label	• Enhanced Lambsquarter and Pigweed control
Princep® 4L	See label	• Improved Crabgrass or Fall panicum control
Topnotch™	1 qt. per acre	• Use a maximum of 3 lbs. of active ingredient per acre per year of acetochlor
Warrior	3.84 fl. ozs. per acre	• For control of many insects such as Cutworms

*Formulations which are not listed may be used: Perform compatibility test and check the product label for directions and precautions.

REDUCED OR NO-TILL CORN

Tank Mix Examples*	Rate (Max.)	Comments
Atrazine 4L	Consult State Extension or product label for maximum use rate in area	• Longer growing season areas • High rainfall areas • Heavy Broadleaf weed pressure
Banvel®/Clarity®	See label	• Burn down existing weeds
Bladex 4L/ Extrazine II®	See label	• High pH soils • Atrazine carryover areas when rotating to Soybeans • Field and Silage corn only
Gramoxone Extra	3 pts. per acre	• Burn down existing weeds
Princep 4L	See label	• Improved Crabgrass or Fall panicum control
Topnotch	1.5 qts. per acre	• Enhanced Grass and Nutsedge control
Touchdown	6.33 pts. per acre	• Burn down existing weeds
2,4-D	See label	• Burn down existing weeds
Warrior	3.84 fl. ozs. per acre	• For control of many insects such as Cutworms

*Formulations which are not listed may be used: Perform compatibility test and check the product label for directions and precautions.

THIS PRODUCT AND GRAMOXONE EXTRA, TOUCHDOWN, 2,4-D in reduced or no-till Corn, Gramoxone Extra, Touchdown and/or 2,4-D will burn down existing weeds. Gramoxone Extra should be applied to emerged weeds when they are small. Weeds 1 to 6 inches in height are the easiest to control. Large weeds may be more difficult to control. Tank mixes with atrazine and Bladex will often aid in control of difficult weeds. Consult the Gramoxone Extra, Touchdown or 2,4-D product label for further information on weeds controlled.

Gramoxone Extra is a Restricted Use Pesticide. Refer to the Gramoxone Extra label for further directions, precautions and limitation relative to its use.

POST-EMERGENCE TANK MIX COMBINATIONS

This product may be applied before, with or following the use of one or more of the following herbicides: Accent®, atrazine, Banvel, Basis®, Basis Gold, Beacon®, bladex, Buctril®, Buctril/atrazine, Clarity, Exceed, Extrazine II, Headline®, Liberty, Lightning™, Marksman, Peak®, Permit®, Poast (Plus and HC), Princep, Prowl®, Pursuit®, Scorpion™ III, Shotgun®. Read the other product label(s) for directions for use, precautions, restrictions and a list of weeds controlled. This product may be tank mixed with any product approved for use on Corn unless it is prohibited on the other manufacturer's label.

When tank mixed, read the other product label and follow the additional use direction given in this table:

This product can be applied to Corn up to 11 inches tall.

THIS PRODUCT PLUS

Product	Rate	Comments
Banvel Clarity Marksman	0.5 to 1 pt./acre 8 to 15 fl. ozs./acre 2 to 3.5 pts./acre	• Apply pre-plant or pre-emergence in reduced/no-till systems. • Pre-emergence on all soils; Medium and Fine textured with >2% of organic matter. Early post-emergence up to 8-inch-tall Corn on all soils. If Grasses are more than 2-leaf stage, combine with another herbicide to control these weeds.
Buctril Buctril/atrazine Shotgun	1.5 pts./acre 2 pts./acre 2 to 3 pts./acre	• Refer to product label for use directions. • Refer to Shotgun label for timing and use directions.
Atrazine	0.5 to 2.0 lbs. a.i./acre	• Pre-plant surface, pre-plant incorporated, pre-emergence or early post-emergence (up to 8-inch-tall Corn). If emerged weeds are greater than 1.5 inches tall at the time of application, add an appropriate post-emergence herbicide.
Bladex Extrazine II	1.0 to 2.0 lbs. a.i./acre	• Post-emergence (up to 4-leaf stage of Corn) but before weeds are more than 1.5 inches tall. Apply in water only. Do not spray emerged Corn plants with a mixture containing liquid fertilizer. These mixtures are not recommended on Sand or Loamy sand soils with less than 1% organic matter.
Liberty	16 to 28 fl. ozs./acre	• FOR USE ON LIBERTY TOLERANT CORN ONLY. Apply until the Corn is 24 inches tall or in the V-7 stage of growth. Apply to Grass and Broadleaves up to 6 inches tall. Do not add additional surfactant.
Lightning	1.28 fl. ozs./acre	• FOR USE ON IMI CORN ONLY. Use a NIS at .25% v/v and a liquid nitrogen fertilizer at 1 to 2 qts. per acre or ammonium sulfate at 2.5 lbs. per acre.
Poast Plus Poast HC	16 to 24 fl. ozs./acre 7.0 to 10.5 fl. ozs./acre	• FOR USE ONLY ON SETHOXYDIM RESISTANT (SR) FIELD CORN. Use for post-emergence control of certain Annual and Perennial grass weeds. Add Dash HC or crop oil concentrate. Severe crop injury will occur to Corn hybrids not labeled as SR Corn.
Prowl 3.3 EC	1.8 to 3.6 pts./acre	• Pre-emergence to early post-emergence (up to 3-inches tall Corn) but before weeds are more than 1-inch tall.
Princep	1.0 to 3.0 lbs. a.i./acre	• Pre-plant surface, pre-plant incorporated, pre-emergence to Corn.
Pursuit 2.5L Pursuit 70DG	4 fl. ozs./acre 1.4 fl. ozs./acre	• Use only on Pursuit resistant (IR) or tolerant (IT) varieties. • Apply pre-plant surface, pre-plant incorporated, pre-emergence or early post-emergence (up to 3-inch-tall weeds).
Resource*	4 to 6 fl. ozs./acre	• Apply up to 10-leaf Corn to weeds less than 5 inches tall. Add a crop oil concentrate at 1 to 2 pts. per acre and either 28% nitrogen at 2% v/v or ammonium sulfate at 2.5 lbs. per acre. May cause some burn or spotting to Corn leaves.
2,4-D Ester		• Apply pre-plant surface or pre-emergence to control emerged Broadleaf weeds in Corn.

(Continued)

THIS PRODUCT PLUS (Continued)

Product	Rate	Comments
2,4-D Ester		• Apply pre-plant surface or pre-emergence to control emerged Broadleaf weeds in Corn.
Accent 75 WDG Beacon 75 WDG Basis	¼ to ¾ fl. oz./acre .76 fl. fl. oz./acre ¼ to ¾ fl. oz./acre	• Minimum use rates for the product (Qts./Acre): Soil <3% OM 3-7% OM >7% OM Coarse 2 2 2.5 Medium 2 2 to 2.5 2.5 to 3 Fine 2 2 to 2.5 2.5 to 3 • Always add NIS at .25% (v/v); and in addition if applied in dry conditions, add 4% (v/v) clear liquid fertilizer. • Banvel, Clarity, Marksman, Buctril/atrazine may be added to this mixture to provide burn down residual control of Broadleaf weeds.
Basis Gold	14 fl. ozs./acre	• Minimum use rates for the product (Qts./Acre): Soil <3% OM 3-7% OM >7% OM Coarse 2 2 2.5 Medium 2 2 to 2.5 2.5 to 3 Fine 2 2 to 2.5 2.5 to 3 • Always add crop oil concentrate at 1% v/v or under dry, arid conditions, 2% v/v and 28% liquid nitrogen at 2 qts. per acre or ammonium sulfate at 2 lbs. per acre. • Banvel, Clarity, Marksman, Buctril, Scorpion III or Tough® may be added to this mixture to provide burn down and residual control of Broadleaf weeds.
Warrior	1.92 to 3.84 fl. ozs./acre	• For control of many insects such as Cutworms and Stalk borers.

APPENDIX I

Procedure for Testing the Compatibility of This Product and Tank Mixes with Fluid Fertilizers

Since fluid fertilizers vary, the following procedure is suggested for determining whether this product may be combined with a specific fluid fertilizer for spray tank application.

MATERIALS NEEDED:

- This product and any tank mix products.
- Fluid fertilizer to be used.
- Adjuvant for fertilizer tank mix. Use any adjuvant cleared for use on growing crops under 40 CFR 180.1001 to improve the compatibility of this product with fluid fertilizers. The adjuvant which provides the best emulsification depends on the specific fertilizer under consideration.
- Two 1-quart, wide-mouth glass jars with lid or stopper.
- Measuring spoons (a 25 ml pipette or graduated cylinder provides more accurate measurement).
- Measuring cup, 8 ounces (257 ml).

PROCEDURE:

1. Pour a pint (about 473 ml) of the fluid fertilizer into each of the quart jars.
2. Add this product and any tank mix combination to the jars. The order of addition is wettable powders first with mixing, followed by flowables with mixing and the EC's last. The rate of wettable powders and dry flowables is 1½ teaspoons per pound of product per acre to be applied. EC's should be added at the rate of ½ teaspoon for each pint per acre to be applied. Pre-mixing the wettable powders in 1 ounce of water before adding to the pint of fluid fertilizer will improve the compatibility of the final mixture.
3. Add ½ teaspoon (2 ml) adjuvant to one of the jars, label it as "with", and mix. The rate of ½ teaspoon per pint is equal to 3 pints of adjuvant per 100 gallons of fluid fertilizer.
4. Close both jars with lids or stoppers and mix the contents by turning the jars upside down 10 times.
5. Inspect the surface and body of the mixtures —
 - a. Immediately after completing the jar inversions.
 - b. After allowing the jars to stand quietly for 30 minutes.
 - c. And then again after turning the jars upside down 10 times after the 30-minute inspection.

EVALUATION:

If either mixture remains uniform for 30 minutes, the combination may be used. Should either mixture separate after 30 minutes, but readily remix uniformly with 10 jar inversions, the mixture can be used if

adequate agitation is maintained in the tank. If the mixture with adjuvant is satisfactory but the one without adjuvant is not, be sure to use the adjuvant in the spray tank. Add the adjuvant first at a rate of 3 pints per 100 gallons of fluid fertilizer. Foaming may be minimized by using moderate agitation. **IF NON-DISPERSIBLE OIL, SLUDGE OR CLUMPS OF SOLIDS FORM IN THE MIXTURES, THE COMBINATION SHOULD NOT BE USED.**

APPENDIX II

Dry Bulk Fertilizer

All individual State regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company selling this product.

When applying this product alone or in tank mixes with dry bulk fertilizers, follow all directions for use and precautions on the respective tank mix product labels regarding rates, soil texture, application methods and rotational restrictions. Use a minimum of 200 pounds of dry fertilizer per acre.

Fertilizer	N	P	K
Ammonium Phosphate-sulfate	16	20	0
Ammonium Sulfate	21	0	0
Diammonium Phosphate	18	46	0
Monoammonium Phosphate	11	56	0
Potassium Chloride	0	0	60
Potassium Sulfate	0	0	52
Urea ¹	45	0	0

¹Some ureas may be phytotoxic when high rates are applied to Corn. Use only urea rates known to be safe for Corn application.

For impregnating the pesticides on dry fertilizers, use an appropriate mixer equipped with suitable spraying equipment. The spray nozzles should be positioned inside the mixer to provide uniform spray coverage of the tumbling fertilizer. This product should be sprayed uniformly onto the fertilizer using a fine spray pattern. Tank mix components may be applied as separate ingredients with powders and dry flowables added first or they may be mixed in a slurry in the proper ratio and added jointly. This product may also be impregnated on the go and applied with pneumatic applicators.

The following table provides a reference to determine the amount of this product to be mixed per ton of dry bulk fertilizer for a range of herbicide rates.

Fertilizer Rate (Lbs. per Acre)	Acres per Ton	This Product (Quarts per Acre)		
		Quarts of Herbicide per Ton		
		1.6	2.4	3.3
200	10.0	16.0	24.0	33.0
300	6.7	10.7	16.1	22.1
400	5.0	8.0	12.0	16.5
500	4.0	6.4	9.6	13.2
600	3.3	5.3	7.9	10.9
700	2.9	4.6	7.0	9.6

To determine the amount of this product needed for other rates of fertilizer, use this formula

$$\frac{\text{This Product (quarts/acre)}}{\text{Pounds fertilizer/acre}} \times 2000 = \frac{\text{Quarts of This Product}}{\text{per ton of fertilizer}}$$

If the herbicide/fertilizer mixture is too wet, use of a drying agent is required to provide a dry, free-flowing mixture. For mixtures to be used in spinning-disc applicators, Micro-Cel™ E calcium silicate powder (Manville, Filtration & Minerals) is recommended for use as a drying agent. Mixtures to be used in pneumatic applicators should use Micro-Cel™ E or Agsorb™ 16/30 RVM-MS granular clay (Oil-Dri Corporation). The drying agents should be added separately and uniformly to the prepared pesticide/fertilizer mixture, in a quantity that is sufficient to provide a suitable free-flowing mixture. Generally, less than 2% Micro-Cel E or 5% Agsorb 16/30 RVM-MS by weight is required.

Precautions: To avoid potential for explosion, do not impregnate this product on ammonium sorbate nitrate, potassium nitrate or sodium nitrate fertilizer or fertilizer blends. Do not impregnate on single (0-20-0) or triple (0-46-0) super phosphate. Do not impregnate on straight limestone because this product will not be absorbed.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep container tightly closed when not in use. Do not store near seeds, fertilizers or food stuffs. Can be stored at temperatures as low as -30°F.

PESTICIDE DISPOSAL: Rinse spray equipment. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

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.

FOR BULK AND MINI-BULK CONTAINERS

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

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

FOR MINI-BULK CONTAINERS

REFILL ONLY WITH THIS PRODUCT. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than this product will result in contamination and may weaken container. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container. Circulation before dispensing is required.

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

WARRANTY—CONDITION OF SALE

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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