PM32 100-716 10f34

JAN 13 1994

Ms. Karen S. Stumpf
Ciba Plant Protection
CIBA-GEIGY Corporation
P.O. Box 18300
Greensboro, North Carolina 27419-8300

Dear Ms. Stumpf:

Subject: Cycle® Herbicide
EPA Registration Number 100-716
Application Dated December 20, 1993, Requesting Amendments To Labeling as Listed on Application

The subject request for the following labeling amendments: add voluntary risk reduction measures for cyanazine per EPA letter of December 9, 1993, add cocklebur and velvetleaf for partial control and other minor administrative amendments; have been reviewed and found acceptable for registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended provided that you:

1. Add a statement of pounds per gallon for cyanazine to the front panel, following the ingredient statements, as required (156.10 (g)(4), Code of Federal Regulations). We note that you have added this information in the text of the label.

2. Submit five (5) printed copies of the final printed label before releasing the product for shipment, under the label.

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

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

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (7505C)

Enclosure

Highlighted 3034

Reviewed 1-12-94
D. Wilson

DRAFT
BOOKLET

Restricted Use Pesticide

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification. See Precautionary Statements for reasons this product is classified Restricted Use

(Front Cover of Removable Booklet)

Cycle®

Herbicide

For weed control in corn and grain sorghum

Active Ingredient:	
Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide	22.0%
Cyanazine: 2[[4-chloro-6-(ethylamino)-s-triazin-2-yl]amino-]-2-methylpropionitrile	22.0%
Inert Ingredients:	56.0%
Total:	100.0%

2 1/2 Gallons
U.S. Standard Measure

needs statement re lbs/gal here. see letter going out. X

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-716
EPA Est. 100-LA-1

ACCEPTED
with COMMENTS
In EPA Letter Dated
JAN 13 1994
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

Ciba Plant Protection
Ciba-Geigy Corporation
Greensboro, North Carolina 27419

Ciba-Geigy

CGA

[GANNONC.LABELC]CYCLEF6 - 12/17/93

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product. If terms are not acceptable, return the unopened product container at once.

Conditions of Sale and Warranty

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 Ciba-Geigy or the Seller. All such risks shall be assumed by the Buyer.

Ciba-Geigy warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. Ciba-Geigy makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Ciba-Geigy or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. Ciba-Geigy and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Ciba-Geigy.

DIRECTIONS FOR USE

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

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

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

Reentry Statement

Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and appropriate actions to take in case of accidental exposure, as described under Precautionary Statements on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "CAUTION. Area treated with Cycle on (date of application). Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, flush eyes or skin with plenty of water. Call a physician if irritation persists. Remove and wash contaminated clothing before reuse."

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, because crop injury may result.

Protective Clothing Requirements

Use of protective clothing and equipment and following the precautions below can reduce risk associated with mixing, loading and applying this product.

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

Best Management Practices for the Protection of Ground and Surface Water

This product may not be mixed or loaded within 50 feet of perennial or intermittent streams and rivers, natural or impounded lakes, and reservoirs. This product may not be mixed, loaded or used within 50 feet of all wells, including abandoned wells, drainage wells, and sinkholes. This product may not be applied aerially or by ground within 66 feet of the points where field surface water run-off enters perennial or intermittent streams and rivers or within 200 ft. of natural or impounded lakes and reservoirs. This product may only be applied to highly erodible land if the 66 foot buffer or setback from runoff points is planted to crop or seeded with grass.

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 imperevious 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 of 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 deliv-

#34

ering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding well-head setbacks and operational area containment.

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

Cyanazine Rate Limits

Cycle Herbicide contains 2 lbs. of cyanazine active ingredient per gallon.

a. Do not apply more than 6.5 lbs. total cyanazine a.i. (all sources) per acre per year to any land.

b. On highly erodible land, as defined by the Soil Conservation Service, if plant residue cover is less than 30%, do not apply more than 3.0 lbs. total cyanazine a.i. (all sources) per acre per year.

A. General Information

Cycle is a selective herbicide which will control most annual grasses and certain broadleaf weeds in corn and grain sorghum. Cycle can be mixed with water or fertilizer and applied as an early preplant, preplant surface-applied, preplant incorporated, or preemergence treatment.

Where directions specify a Cycle tank mixture with an AAtrex® or Princep® formulation, other brands of atrazine or simazine may be used. Cycle may also be tank mixed with Bicep®. Follow the practices, recommendations, and limitations on the respective product labels. Follow the rates, recommendations, and limitations on the AAtrex or respective atrazine product label, if other brands of atrazine are used. For reduced tillage or no-till practices, Gramoxone® Extra or Roundup® may be mixed with Cycle and Cycle tank mixtures. For some specific no-till practices, 2,4-D and/or Banvel® may be added. Where tank mixtures are planned with 2,4-D and/or Banvel, check thoroughly for compatibility before mixing in the spray tank.

Note: The amine form of 2,4-D tends to be more compatible in the tank mix.

Observe all precautions and limitations on the labels of each product used in tank mixtures. Tank mixtures are permitted only in those states where the tank mix partner is registered.

70434

Note: Certain states may have established rate limitations for atrazine within specific geographical areas. Consult your state lead pesticide control agency for additional information. It is a violation of this label to deviate from state use regulations.

If Cycle is incorporated, any supplemental tillage before planting must not exceed the depth of incorporation.

Dry weather following a preemergence application of Cycle alone or a tank mixture may reduce effectiveness. Cultivate if weeds appear.

When reference is made to weeds partially controlled, partial control can either mean erratic control from good to poor, or consistent control at a level below that generally considered acceptable for commercial weed control.

Following many years of continuous use of cyanazine (one of the ingredients in Cycle), and products chemically related to cyanazine, biotypes of some of the weeds listed on this label which are controlled by the cyanazine component have been reported to develop resistance to this and chemically related herbicides. Where this is known or suspected and weeds controlled by this product are expected to be present along with resistant biotypes, we recommend the use of Cycle in combination or in sequence with registered herbicides which do not contain triazines. Consult with your State Agricultural Extension Service for specific recommendations.

Precaution: 1) Injury may occur following the use of Cycle under abnormally high soil moisture conditions during early development of the crop. 2) Do not apply Cycle postemergence over-the-top of corn or grain sorghum, since injury may occur.

1. Soil Textures and Herbicide Rates

Where rates are based on coarse-, medium-, or fine-textured soils, it is understood that soil textural classes are generally categorized as follows:

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

Within rate ranges in the rate tables and elsewhere on this

label, use the lower rate on soils relatively coarse-textured or low in organic matter; use the higher rate on soils relatively fine-textured or high in organic matter.

Note: Cycle, alone or in tank mixture, may be applied preemergence following preplant surface or preplant incorporated application of other herbicides. When applying Cycle following a preplant treatment that contains metolachlor or cyanazine, do not exceed the maximum labeled rate for these herbicides on corn or grain sorghum.

Thoroughly clean sprayer or other application device before using. Dispose of cleaning solution in a responsible manner. Do not use a sprayer or applicator contaminated with other materials, or crop damage or clogging of the application device may occur.

2. Mixing Instructions

Cycle Alone: Mix Cycle with water or fluid fertilizer. Fill the spray tank one-half to three-fourths full with water or fluid fertilizer, add the proper amount of Cycle, and then add the rest of the water or fluid fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform suspension.

Tank Mixtures: Fill the spray tank one-fourth full with water, and start agitation. Note: When one or more tank mix partners are used with Cycle, allow each to fully disperse before adding the next product. Then, add Cycle. If Gramoxone Extra or Roundup is being used with Cycle or Cycle tank mixtures, add it after Cycle and then add the remainder of the water.

For tank mixtures with AAtrex, Bicep or Princep, fluid fertilizers may replace all or part of the water as the carrier. For tank mixtures with other herbicides, see additional mixing instructions on their respective labels. For each mixture check compatibility with fluid fertilizer, as described below, before mixing in spray tank. For all tank mixtures, agitate during mixing and application to maintain a uniform suspension.

Note: Do not mix Gramoxone Extra with suspension-type fluid fertilizers containing clay as the spray carrier.

Compatibility Test: Since liquid fertilizers can vary, even within the same analysis, always check compatibility with herbicide(s) each time before use. Be especially careful when using complete suspension or fluid fertilizers since serious compatibility problems are more likely to occur. Commercial compatibility agents may improve

compatibility in some instances. The following test assumes a spray volume of 25 gals. per acre. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure:

1. Add 1 pint of fertilizer to each of 2 one-quart jars with tight lids.

2. To one of the jars add 1/4 tsp. or 1.2 milliliters of a compatibility agent approved for this use, such as Compex® or Unite® (1/4 tsp. is equivalent to 2 pts. per 100 gals. spray). Shake or stir gently to mix.

3. To both jars add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

Dry herbicides:	For each pound to be applied per acre, add 1.5 level teaspoons to each jar.
Liquid herbicides:	For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

4. After adding all ingredients, put lids on and tighten, and invert each jar ten times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the two jars. If either mixture separates, but can be remixed readily, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (A) slurry the dry herbicide(s) in water before addition, or (B) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before addition to the mixture. If incompatibility is still observed, do not use the mixture.

5. After compatibility testing is complete, dispose of any pesticide wastes in accordance with the directions in the Storage and Disposal section at the end of this label.

3. Application Procedures

Application Timing

Cycle alone or in tank mixtures with other labeled herbi-

cides may be applied for weed control in corn and grain sorghum. Refer to the appropriate crop section of the label of the tank mix partner to determine if application timings listed below are recommended.

(1) Early Preplant and Preplant Surface Applied: For reduced-tillage or no-tillage systems only, Cycle alone or Cycle plus AAtrex, Bicep or Princep, may be applied before planting as specified in the corn or grain sorghum section of the label. Use only split applications for early preplant treatments made 30-45 days before planting with 2/3 the recommended broadcast rate for the crop and soil texture applied initially and the remaining 1/3 at planting. Treatments fewer than 30 days before planting may be made either as a split or a single application. If actively growing annual weeds less than 2 inches in height are present at time of treatment, apply Cycle alone or with AAtrex or Bicep as indicated in the Cycle Combinations section of the label. If weeds are present and exceed 2 inches in height at time of treatment, apply in a tank mixture with a contact herbicide (for example, Gramoxone Extra or Roundup) either alone or with AAtrex, Bicep or Princep as indicated in the Cycle Combinations section of this label. If perennial broadleaf weeds are present at the time of treatment, the addition of 2,4-D or Banvel may improve performance. For best results, the spray gallonage and application procedure must be such that complete coverage of the foliage is obtained.

Observe directions for use, precautions, and restrictions on the labels of the herbicides used. To the extent possible, do not move treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished.

(2) Preplant Incorporated: Apply Cycle or Cycle plus AAtrex, Bicep or Princep to the soil and incorporate into the top 2 inches of soil within 14 days before planting. Use a finishing disk, harrow, rolling cultivator, or similar implement capable of providing uniform 2 inch incorporation. Use a preplant incorporated application if furrow irrigation is used or if a period of dry weather after application is expected. If the crop will be planted on beds, apply and incorporate Cycle or Cycle tank mixtures after bed formation unless specified otherwise.

(3) Preemergence: Apply Cycle or Cycle plus AAtrex, Bicep and Princep, during planting (behind the planter) or after planting, but before weeds or crops emerge.

Ground Application: Apply Cycle alone or in tank mixtures by ground equipment in a minimum of 10 gals. of spray mixture per acre unless otherwise specified.

Use sprayers that provide accurate and uniform application. For Cycle tank mixtures with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

Calculate the amount of herbicide needed for band treatment by the formula:

band width in inches / row width in inches	X	broadcast rate per acre	=	amount needed per acre of field

Avoid application to humans or animals. Loaders should avoid inhalation of spray mist and prolonged contact with skin and should wash thoroughly before eating and at the end of each day's operation.

Notes: (1) Do not apply this product through any type of irrigation system. (2) Do not apply by aerial equipment.

4. Dry Bulk Granular Fertilizers

Many dry bulk granular fertilizers may be impregnated or coated with Cycle alone or with selected Cycle tank mixtures which are (1) registered for preplant incorporated or preplant-surface application; (2) which are used to control weeds in corn; and (3) are not prohibited from use on dry bulk granular fertilizers.

When applying Cycle or Cycle mixtures with dry bulk granular fertilizers, follow all directions for use and precautions on the respective product labels including rates per acre, soil texture, application methods (including timing of application), and rotational crops.

All individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

Prepare the herbicide/fertilizer mixtures by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Cycle onto the fertilizer must be placed to provide uniform spray coverage. Care should be taken to aim the spray onto the fertilizer only, and to avoid spraying the walls of the blender.

If the herbicide/fertilizer mix is too wet, add a highly absorptive material such as Agsorb®, or similar granular clay materials, to obtain a dry free-flowing mixture. Absorptive materials should be added only after the herbicide has been thoroughly blended into the fertilizer mixture. Actively blend the herbicide/fertilizer mixture for five minutes before adding absorptive materials. Best application results will be obtained by using a granule of 6/30 particle size or of a size similar to that of the fertilizer material being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight. When the impregnation process is being conducted with on-board impregnation devices on pneumatic applicators, use of absorptive materials (drying agents) is not recommended.

Calculate amounts of Cycle, AAtrex, Bicep or Princep by the following formula:

$$\frac{2{,}000 \text{ lbs. of fertilizer per acre}}{} \times \text{pts./acre of liquid or flowable product} = \text{pts. of liquid or flowable product per ton of fertilizer}$$

$$\frac{2{,}000 \text{ lbs. of fertilizer per acre}}{} \times \text{lbs./acre of dry product} = \text{lbs. of dry product per ton of fertilizer}$$

Precautions: To avoid potential for explosion, (1) Do not impregnate Cycle or Cycle mixtures on ammonium nitrate, potassium nitrate or sodium nitrate either alone or in blends with other fertilizers. (2) Do not combine Cycle or Cycle mixtures plus any other herbicide with single superphosphate (0-20-0) or treble superphosphate (0-46-0) because inactivation of the herbicide can occur. (3) Do not use Cycle or Cycle mixtures on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

Application

Apply 200-700 pounds of the herbicide/fertilizer mixture per acre. For best results, use properly-calibrated equipment and apply the mixture immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop injury. Non-uniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil may improve weed control. On fine- or medium-textured soils in areas where soil incorporation is not planned apply the mixture 14 days before planting to allow moisture to move the

herbicide/fertilizer mixture into the soil. When AAtrex, Bicep or Princep is added to the mixture, apply approximately 30 days before planting.

Precaution: To avoid potential crop injury, do not use the herbicide/fertilizer mixture on crops where planting beds are to be formed.

Cycle Applied Alone

1. Weeds Controlled

barnyardgrass (watergrass)	southwestern cupgrass
crabgrass	witchgrass
crowfootgrass	yellow foxtail
fall panicum	yellow nutsedge
foxtail millet	Eastern black nightshade
giant foxtail	carpetweed
goosegrass	common ragweed
green foxtail	Florida pusley
prairie cupgrass	galinsoga
red rice	lambsquarters
signalgrass (Brachiaria)	pigweed
	Pennsylvania smartweed
	prickly sida
	sunflower

Weeds Partially Controlled*: cocklebur, sandbur, seedling johnsongrass, shattercane, Texas panicum, velvetleaf, volunteer sorghum, wild proso millet.

*See General Information section. Control of these weeds can be erratic due partly to variable weather conditions.

2. Rotational Crops: Cycle: (1) If crop treated with Cycle alone is lost, corn or Concep-treated grain sorghum (milo) may be replanted immediately. Do not make a second broadcast application of Cycle. If the original application was banded and the second crop is planted in the untreated row middles, a second banded treatment may be applied. (2) Barley, oats, rye, or wheat may be planted 4 1/2 months following treatment; alfalfa may be planted 4 months following application. Tomatoes may be planted six months following application. (3) Any crop on this label in addition to cotton, peanuts, pod crops, potatoes, safflowers, soybeans, root crops, tobacco, cabbage, peppers, stone fruits, tree nuts, barley, buckwheat, grain sorghum (milo), oats, rice, rye, or wheat may be planted in the spring following treatment. Clover may be seeded 9 months following application. All other rotational crops may be planted 12 months after application. (4) Cycle Tank Mixtures: For Rotational Crops restrictions for Cycle used in tank mixtures, refer to the statements/restrictions above for Cycle and to the respective product labels of any mixing partner(s) for additional statements/restrictions.

Corn - Cycle Alone

Apply Cycle early preplant (30-45 days before planting), preplant surface, preplant incorporated, or preemergence using the appropriate rate from Table 1. Do not use on sand or loamy sand soils with less than 1% organic matter.

Early Preplant and Preplant Surface Applied: Refer to instructions for use of Cycle alone under Application Procedures. Use on medium- and fine- textured soils with minimum-tillage or no-tillage systems in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, TN, WI, and WY. Broadcast the recommended rate of Cycle for soil texture and percent organic matter indicated in Table 1. In no-till corn where heavy crop residue exists, the rates in Table 1 should be increased by 15%. Under dry conditions, irrigation after application is recommended to move Cycle into the soil.

On medium- and fine-textured soils with minimum- or no-tillage systems in DE, MD, MI, NY, OH, PA, VA, and WV, preplant surface applications may be applied following the directions for use above. If the amount of rainfall results in unsatisfactory length of weed control following the earlier Cycle treatment, a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide may be used, i.e., AAtrex, Beacon®, Bicep®, 2,4-D, Banvel, Basagran®, bromoxynil (Brominal® or Buctril®), Laddok® or Marksman®.

Notes: (1) If the postemergence treatment includes metolachlor, do not exceed the maximum labeled rate for metolachlor on corn based on soil texture. (2) Observe all directions for use, precautions and limitations on the label of the postemergent herbicide.

Preplant Incorporated or Preemergence: Follow instructions for use of Cycle alone under Application Procedures. Use rates of Cycle for soil textures and organic matter levels indicated in Table 1.

Notes: (1) Do not apply more than the labeled application rate for a given soil texture per year either as a single or split treatment or illegal residues may result. (2) In the event of escape of annual broadleaf weeds following preplant surface, preplant incorporated, or preemergence treatment with Cycle, follow with a postemergence application of an appropriately labeled broadleaf and/or grass weed herbicide, i.e., AAtrex, Basagran, Beacon, Bicep, Brominal, Buctril, Banvel, Laddok, Marksman or 2,4-D. (3) If the postemergence treatment includes metolachlor, do not exceed the maximum labeled rate for metolachlor on corn based on soil texture.

Table 1: Cycle* Alone - Early Preplant, Preplant Surface**, Preplant Incorporated or Preemergence - Corn

	Broadcast Rates Per Acre***			
	Percent Organic Matter in Soil			
Soil Texture	Less than 1%	1-2.5%	2.5-4%	Over 4%
COARSE Sand, loamy sand	DO NOT USE	2.5-3 qts.	3-3.5 qts.	4 qts.
COARSE Sandy loam	2.5 qts.	2.5-3 qts.	3-3.5 qts.	4 qts.
MEDIUM	3 qts.	3-3.5 qts.	3.5-4 qts.	4.5 qts.
FINE	3 qts.	3.5-4 qts.	4-4.5 qts.	5 qts.
Muck or peat soils (soils with more than 20% organic matter)	DO NOT USE			

*Do not use on sweet corn where soils have less than 1% organic matter.

**In no-till corn where heavy residues exist, increase the rates in Table 1 by 15%.

***Where heavy infestations of yellow nutsedge exist, Cycle may be applied in tank mixtures with Dual® formulations to aid in control. Refer to the respective Dual label for rate limitations.

Note: Maximum rate limit per acre per year for all applications is 6.5 lbs. cyanazine from all sources except on highly erodible soils with less than 30% plant residue cover, the rate limit is 3 lbs. cyanazine.

Corn - Cycle Combinations

IMPORTANT FOR TANK MIXTURES WITH BICEP OR AATREX (OR OTHER BRANDS OF ATRAZINE) - If applying Cycle in tank mixture with AAtrex or Bicep, all the restrictions and rate limitations appearing on the AAtrex or Bicep label must be followed if more restrictive/protective than those on this label. In addition, if AAtrex or Bicep is/must be applied at rates lower than those recommended on this label, broadleaf weed control may be affected. Refer to the AAtrex or Bicep label for weeds controlled at the reduced rates.

1. Tank Mixture with AAtrex or Princep

In addition to the weeds controlled by Cycle alone, Cycle plus AAtrex or Princep, applied preplant surface, preplant incorporated or preemergence, also controls such additional weeds as follows: cocklebur, common purslane, hairy nightshade, and velvetleaf.

Early Preplant and Preplant Surface Applied: Follow instructions for use of Cycle alone under Application Procedures and under application instructions for Cycle Alone on corn. Apply Cycle + AAtrex or Princep in CO, IL, IN, IA, KS, KY, MN, MO, MT, NE, ND, SD, TN, WI, and WY at rates indicated in Table 2. Apply the tank mixtures as a split or single treatment in the states above using the procedure indicated in the Corn - Cycle Alone - Early Preplant and Preplant Surface Applied section of the label.

Preplant Incorporated or Preemergence: Follow instructions for use of Cycle alone under Application Procedures. Apply the rates of Cycle + AAtrex or Princep indicated in Table 2.

Note: Do not apply more than the labeled rate for a given soil texture per year either as a split or single treatment, or illegal residues may result.

2. Tank Mixture with Bicep

If a lower rate of atrazine is desired than that applied with Bicep alone, a tank mixture of Cycle plus Bicep may be used for control of annual weeds.

Applications may be made early preplant, preplant surface, preplant incorporated or preemergence. For control of actively growing, emerged annual weeds less than 2 inches in height, a contact herbicide will generally not be required for use with the Cycle plus Bicep tank mixture. The use of a nitrogen solution or complete fertilizer solution in the spray mixture or as the carrier, will improve

th. burndown activity of the tank mixture. For weeds exceeding 2 inches in height, addition of a contact herbicide (e.g., Gramoxone Extra or Roundup®) to the mixture is recommended in accordance with its label.

For applications made less than 30 days before planting, apply 1/2-3/4 the recommended rate of Cycle Alone for the given soil texture and organic matter content in Table 1 in tank mixture with 1/2-3/4 the rate of Bicep alone as specified in the Bicep label.

For applications made 30-45 days before planting, the rate of Cycle and Bicep as indicated above may be applied as a split treatment with 2/3 of the Cycle and Bicep rates applied initially followed by the remaining 1/3 at planting.

Notes: (1) Tank mixtures of Cycle and Bicep as described above may provide less effective residual control of large seeded broadleaf weeds (e.g., velvetleaf and cocklebur) than Bicep applied alone at the full rate. (2) If perennial broadleaf weeds are present at the time of treatment, the addition of 2,4-D and/or Banvel to the tank mixture in accordance with its label may improve performance.

Table 2. Cycle + AAtrex or Princep, Preplant Surface, Preplant Incorporated or Preemergence* - Corn

	Broadcast Rates Per Acre			
	Percent Organic Matter in Soil			
	Less than 1%	1-2.5%	2.5-4%	
Soil Texture	Qts. Cycle + Lbs. AAtrex** Nine-O® or Princep Caliber 90	Qts. Cycle + Lbs. AAtrex Nine-O or Princep Caliber 90	Qts. Cycle + Lbs. AAtrex Nine-O or Princep Caliber 90	Qt Lb Ni or Ca
Coarse Sand, Loamy Sand	DO NOT USE	2.5-3 + .4-1.2	3-3.5 + .6-1.4	4 + .8
Coarse Sandy Loam	2.5 + .6-1.2***	2.5-3 + .8-1.4	3-3.5 + 1-2	4 + 1.
Medium	3.0 + .8-1.4.	3-3.5 + 8-2	3.5-4 + 1-2	4. + 1.
Fine	3.0 + .8-1.7	3.5-4 + 1-2	4-4.5 + 1-2.2	5. + 1.
Muck or Peat Soils (soils with more than 20% organic matter)	DO NOT USE			

*Do not use on sweet corn on soils with less than 1% organic matter.

**When using AAtrex 4L (or Princep 4L) use equivalent rates. One lb. of Nine- Caliber 90 equals 1.8 pts. of 4L. Use Princep instead of AAtrex when heavy infestations of crabgrass or fall panicum are expected.

***Use the higher rates of AAtrex or Princep when heavy infestations of broadle are expected.

Note: Maximum rate limit per acre per year for all applications is 6.5 lbs. cy all sources except on highly erodible soils with less than 30% plant residue co limit is 3 lbs. cyanazine.

weeds and suppresses many perennial weeds. Roundup combinations will control emerged annual and perennial weeds when applied as directed on the Roundup label. The Cycle + AAtrex or Princep provides preemergence control of the weeds listed on this label under the Corn - Cycle Combinations - Tank Mixtures with AAtrex or Princep section.

Application: Apply before, during, or after planting, but before the corn emerges, at the rates specified in Table 2. Add Gramoxone Extra or Roundup at the following broadcast rates:

Gramoxone Extra: 1.5-2.0, 2.0-2.5 or 2.5-3.0 pts./A to 1-3 inch, 3-6 inch, or 6 inch tall weeds, respectively. Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50-74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6 inches.

Note: Do not apply combinations containing Gramoxone Extra in suspension-type fluid fertilizers containing clay as the spray carrier because the activity of paraquat will be reduced.

Roundup: 1.5 qts./A for existing annual weeds, or 2-4 qts. per acre for existing perennial weeds. See the Roundup label for weeds controlled and recommended rates for specific weeds.

Apply in 20-60 gals. of water or fluid fertilizer per acre with ground equipment.

Precaution: Do not use on sweet corn on soils with less than 1% organic matter.

4. Tank Mixture with AAtrex or 2,4-D or AAtrex plus 2,4-D or AAtrex plus 2,4-D plus Banvel for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where corn is planted directly into a cover crop, stale seedbed, established sod, or previous crop residues, Cycle applied in combination with AAtrex will kill most emerged small annual weeds. Apply Cycle + AAtrex or 2,4-D or AAtrex plus 2,4-D

before, during or after planting, but before corn emerges according to the rates in Table 2. Where heavy infestation of emerged broadleaf weeds exist, add 0.8-1.6 pts./A of an appropriately labeled 3.8 lbs. ai/gal. 2,4-D amine (such as Weedar 64, Weedar 64A, DMA-4 Herbicide, or Formula 40) to the spray tank last and apply in a minimum of 25 gals. of carrier/A.

As carriers, nitrogen solutions and complete liquid fertilizers, applied before corn emergence, enhance burndown of existing weeds, and therefore are recommended instead of water. Add X-77 surfactant at 1.0-2.0 qts/100 gals. of diluted spray, or another appropriate surfactant at its recommended rate. Apply before weeds exceed 3 inches in height. If alfalfa is present, add Banvel to the spray mixture at 0.33-0.5 pt./A and apply before alfalfa exceeds 6 inches in height.

Precautions: (1) When applying Cycle with AAtrex or 2,4-D or AAtrex + 2,4-D or with AAtrex + 2,4-D + Banvel, do not apply in fluid fertilizer after corn emerges. (2) Do not use mixtures of Cycle plus 2,4-D or Banvel close to corn emergence on coarse-textured soils or injury will occur. (3) Do not apply mixtures containing Banvel on sweet corn.

For fields with existing sod grasses (e.g., bromegrass, orchardgrass, rye or timothy), when existing weeds exceed 3 inches in height or when very dry conditions exist, add Gramoxone Extra at the rate of 2.5 pts./A in place of or in addition to 2,4-D as indicated above. Do not apply Gramoxone Extra in suspension-type fluid fertilizer containing clay as the spray carrier. Observe all directions for use, precautions and limitations on the respective product labels when applying these products in tank mix combination.

Grain Sorghum (Seed Treated with Concep®) - Cycle Alone

Apply Cycle early preplant, preplant surface, preplant incorporated, or preemergence in water or fluid fertilizer to grain sorghum using the appropriate rate specified below. Apply Cycle to sorghum only when the sorghum seed has been properly treated by the seed company with Concep.

Notes: (1) Do not use Cycle on forage sorghum. (2) Do not apply Cycle alone or in tank mixtures on sand and loamy sand soils.

Early Preplant and Preplant Surface-Applied: Refer to instructions for use of Cycle under Application Procedures. For minimum-tillage or no-tillage systems only, Cycle may be applied up to 45 days before planting in CO, IL, IA, KS,

MO, NE and SD. Use only split applications for treatments made more than 15 days before planting, with 2/3 of the broadcast rate applied initially and the remaining 1/3 at planting. Apply the rate of Cycle indicated in Table 3. In no-till sorghum where heavy crop residue exists, the rates in Table 3 should be increased by 15%. Under dry conditions, irrigation after application is recommended to move Cycle into the soil.

Preplant Incorporated or Preemergence: Refer to instructions for use of Cycle under Application Procedures. Apply the rates of Cycle indicated in Table 3. Do not incorporate Cycle more than three inches deep nor use a spike-toothed harrow, deep tillage disk or rolling basket device to incorporate Cycle.

Precautions: (1) If sorghum seed is not properly treated with Concep, Cycle may severely injure the crop. (2) Under high soil moisture conditions prior to sorghum emergence, injury may occur following the use of Cycle. The crop will normally outgrow this effect. (3) Do not use Cycle on sorghum grown under dry mulch tillage or injury may occur. (4) Do not make more than one preemergence application or preplant incorporated application per year, or illegal residues may result. (5) Do not apply to furrow-planted sorghum until furrows are leveled. (6) Deep planter marks or seed furrows should be leveled prior to application. (7) Sorghum growing under stress resulting from insects, wind, sand cutting, hail damage, other herbicides, minor element deficiency, or cold wet soil, or on highly calcareous soil may be injured or suffer stand loss.

Table 3: Cycle Alone - Early Preplant, Preplant Surface*, Preplant Incorporated or Preemergence - Grain Sorghum

Soil Texture	Broadcast Rates Per Acre			
	Percent Organic Matter in Soil			
	Less than 1%	1-2.5%	2.5-4%	Over 4%
COARSE Sand, loamy sand	DO NOT USE	DO NOT USE	DO NOT USE	DO NOT USE
COARSE Sandy loam	2.5 qts.	2.5-3 qts.	3-3.5 qts.	3.5 qts.
MEDIUM	3 qts.	3-3.5 qts.	3-3.75 qts.	4.0 qts.
FINE	3 qts.	3-3.75 qts.	3.5-4 qts.	4.5 qts.
Muck or peat soils (soils with more than 20% organic matter)	DO NOT USE			

*In no-till sorghum where heavy residue exists, increase the rates in Table 3 by 15%.

Grain Sorghum (Seed Treated with Concep)-Cycle Combinations

Cycle in tank mixture with AAtrex or Bicep may be applied in water or fluid fertilizer. Apply Cycle alone or in tank mixture only when the sorghum seed has been properly treated by the seed company with Concep.

Note: Do not use Cycle on forage sorghum.

IMPORTANT: FOR TANK MIXTURES WITH BICEP OR AATREX (OR OTHER BRANDS OF ATRAZINE) - If applying Cycle in tank mixture with AAtrex or Bicep, all the restrictions and rate limitations appearing on the AAtrex or Bicep label must be followed if more restrictive/protective than those on this label. In addition, if AAtrex or Bicep is/must be applied at rates lower than those recommended on this label, broadleaf weed control may be affected. Refer to the AAtrex or Bicep label for weeds controlled at the reduced rates.

Precautions: (1) Applications of Cycle + AAtrex or Cycle + Bicep on highly alkaline soils or on eroded areas where calcareous subsoils are exposed may cause sorghum injury. (2) If sorghum seed is not properly treated with Concep, Cycle + AAtrex or Cycle + Bicep may severely injure the crop. (3) Under high soil moisture conditions before sorghum emergence, injury may occur following the use of Cycle + AAtrex or Cycle + Bicep. The crop will normally outgrow this effect. (4) Do not use Cycle + AAtrex or Cycle + Bicep on sorghum grown under dry mulch tillage or injury may occur. (5) Do not exceed the recommended rate of Cycle + AAtrex or Cycle + Bicep for soil texture and organic matter, or illegal residues may result.

1. Tank Mixture with AAtrex

In addition to weeds controlled by Cycle alone, Cycle + AAtrex applied early preplant, preplant surface, preplant incorporated, or preemergence enhances the control of such weeds as: cocklebur, common purslane, hairy nightshade, lambsquarters, morningglory, ragweed, smartweed, and velvetleaf.

Early Preplant and Preplant Surface-Applied: Refer to instructions for use of Cycle under Application Procedures. For minimum-tillage or no-tillage systems only, Cycle + AAtrex may be applied up to 45 days before planting in IL, IA, eastern KS, MO, NE and SD. Use only split applications for treatments made more than 15 days before planting, with 2/3 of the broadcast rate applied initially and the remaining 1/3 at planting. Apply the rates of Cycle + AAtrex indicated in Table 4.

Precaution: To avoid crop injury, do not use on sand and loamy sand soils.

Preplant Incorporated or Preemergence: Refer to instructions for use of Cycle under Application Procedures. Apply the rates of Cycle + AAtrex indicated in Table 4.

Precaution: To avoid crop injury, do not use on sand and loamy sand soils.

Rotational Crops: When atrazine (AAtrex) is applied in tank mix combination with Cycle, follow the crop rotation restrictions on the atrazine (AAtrex) label.

Table 4: Cycle + AAtrex - Early Preplant, Preplant Surface, Preplant Incorporated or Preemergence - Grain Sorghum

	Broadcast Rates Per Acre			
	Percent Organic Matter in Soil			
	Less than 1%	1-2.5%	2.5-4%	Over 4%
Soil Texture	Qts. Cycle + Lbs. AAtrex Nine-O	Qts. Cycle + Lbs. AAtrex Nine-O	Qts. Cycle + Lbs. AAtrex Nine-O	Qts. Cycle + Lbs. AAtrex Nine-O
COARSE Sand, loamy sand	DO NOT USE	DO NOT USE	DO NOT USE	DO NOT USE
COARSE Sandy loam	2 .6-1.2	2-2.5 .8-1.4	2.5-3 1-2	3 1.2-2.2
MEDIUM	2.5 .8-1.4	2.5-3 .8-2	2.5-3.25 1-2	3.25 1.2-2.2
FINE	2.5 .8-1.7	2.5-3.25 1-2	3-3.5 1-2.2	3.75 1.2-2.2
Muck or peat soils (soils with more than 20% organic matter)	DO NOT USE			

*When using AAtrex 4L, use equivalent rates. One lb. of AAtrex Nine-O equals 1.8 pts. of AAtrex 4L.

2. Tank Mixture with Bicep

If a lower rate of atrazine is desired than that applied with Bicep alone, a tank mixture of Cycle plus Bicep may be used for control of annual weeds.

Applications may be made early preplant, preplant surface, preplant incorporated or preemergence. For control of actively growing, emerged annual weeds that do not exceed 2 inches in height, a contact-type herbicide will generally not be required for use with the Cycle plus Bicep tank mixtures. The use of a nitrogen solution or complete fertilizer solution in the spray or as the carrier will improve the burndown activity of the tank mixture. For weeds exceeding 2 inches in height, addition of a contact-type herbicide (e.g., Gramoxone Extra or Roundup) to the mixture is recommended in accordance with its label.

For applications made less than 30 days before planting, apply one-half (1/2) the recommended rate of Cycle Alone in Table 3 for the given soil texture and organic matter content in tank mixture with one-half (1/2) the rate of Bicep Alone specified on the Bicep label.

For applications made 30-45 days before planting, the rate of Cycle and Bicep indicated above may be applied as a split treatment with 2/3 of the Cycle and Bicep rate applied initially followed by the remaining 1/3 at planting.

Notes: (1) Tank mixtures of Cycle and Bicep as described above may provide less effective residual control of large seeded broadleaf weeds (e.g., velvetleaf and cocklebur) than Bicep applied alone at the full rate. (2) If perennial broadleaf weeds are present at time of treatment, the addition of 2,4-D or Banvel to the tank mixture in accordance with its label may improve performance.

3. Tank Mixture of Cycle + AAtrex or Bicep with Gramoxone Extra or Roundup for Minimum-Tillage or No-Tillage Systems

In minimum-tillage or no-tillage systems where sorghum (seed treated with Concep) is planted directly into a cover crop, stale seedbed, established sod or previous crop residues, the contact herbicides Gramoxone Extra or Roundup may be tank mixed with Cycle or Cycle + AAtrex or Cycle + Bicep. When used as directed, the Gramoxone Extra controls most emerged annual weeds and suppresses many perennial weeds. Roundup combinations will control emerged annual and perennial weeds when applied as directed on the Roundup label. Cycle or Cycle + AAtrex or Cycle + Bicep provides preemergence control of weeds listed on this label under the Grain Sorghum - Cycle Combinations - Tank Mixtures with

AAtrex section.

Application: Apply before, during or after planting but before sorghum emerges, at the rates specified in Tables 3 or 4. Add Gramoxone Extra or Roundup at the following broadcast rates:

Gramoxone Extra: 1.5-2.0, 2.0-2.5 or 2.5-3.0 pts./A to 1-3 inch, 3-6 inch, or 6 inch tall weeds, respectively. Apply surfactant at 1 or 2 pts./100 gals. of spray mixture with 75% or greater or 50-74% nonionic active ingredient, respectively. This treatment will not control weeds taller than 6 inches.

Note: Do not apply combinations containing Gramoxone Extra in suspension-type fluid fertilizers containing clay as the spray carrier because the activity of paraquat will be reduced.

Roundup: 1.5 qts. per acre for control of existing annual weeds, or 2.4 qts. per acre for existing perennial weeds. See the Roundup label for weeds controlled and recommended rates for specific weeds.

Apply in a minimum of 20 gals. of water per acre with conventional spray equipment.

Storage and Disposal

Pesticide Disposal - Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal - Do not reuse empty container. Triple rinse (or equivalent), puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. Keep out of smoke from burning containers.

For minor spills, leaks, etc., follow all precautions and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372.

Precautionary Statements

Hazards to Humans or Domestic Animals

CAUTION

This product may be hazardous to your health.

This product is classified "Restricted Use" because one of the active ingredients, cyanazine, at doses which caused severe maternal illness in laboratory animals, caused birth defects.

Keep out of reach of domestic animals, particularly cattle. Consumption of this product, spray solutions or water contaminated with this product can result in serious illness or possible death of bovines.

Harmful if swallowed, absorbed through skin, or inhaled. Causes eye irritation. Avoid breathing vapor or spray mist and contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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 eyes with plenty of water. Call a physician if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention.

If inhaled: Remove victim to fresh air. Get medical attention.

Note to Physician: There is no specific antidote. If swallowed, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal should be considered.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. **Cyanazine, one of the active ingredients in Cycle Herbicide, has been detected in surface waters that receive run-off from treated areas. To minimize cyanazine run-off, follow the Best Management Practices outlined in the Directions for Use section of this label.**

Groundwater and Surface Water Advisory

Cycle contains the active ingredients metolachlor and cyanazine.

Metolachlor has been identified in limited sampling of ground water and there is the possibility that it may leach through the soil to ground water, especially where soils are coarse and ground water is near the surface. Following application and during rainfall events that cause runoff, metolachlor may reach surface water bodies including streams, rivers and reservoirs.

Care must be taken when using this product to prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Check valves or antisiphoning devices must be used on all mixing equipment.

Cyanazine is a pesticide which can move (seep or travel) through soil and can contaminate ground water which may be used as drinking water. Cyanazine has been found in ground water 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 this product where the water table (ground water) 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 ground water.

3/0434

Banvel® trademark of Sandoz Chemical Corp.

Basagran® and Laddok® trademarks of BASF Company.

Brominal® and Buctril® are trademarks of Rhone-Poulenc Chemical Company.

Compex® trademark of KALO Agricultural Chemicals, Inc.

Gramoxone® trademark of Zeneca Ag Products

Celatom MP-79® trademark of Eagle-Picher Industries, Inc.

Marksman® trademark of Sandoz Ltd.

Roundup® trademark of Monsanto Company.

Unite® trademark of HACO, Inc.

X-77® trademark of Chevron Chemical Company

Ciba Plant Protection
Ciba-Geigy Corporation
Greensboro, NC 27419

CGA

	August 18, 1989
Revised	December 13, 1989
Registered	January 24, 1990
Revised	February 19, 1991
Revised	November 5, 1992 Tank mix with Bicep
Revised	December 16, 1993 BMP's - velvetleaf, cocklebur suppression

[GANNONC.LABELC]CYCLEF6 - 12/17/93

BACK LABEL

Restricted Use Pesticide

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification. See Precautionary Statements for reasons this product is classified Restricted Use

Cycle®
Herbicide

For weed control in corn
and grain sorghum

Active Ingredient:

Metolachlor: 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl) acetamide	22.0%
Cyanazine: 2[[4-chloro-6-(ethylamino)-s-triazin-2-yl]amino-]-2-methylpropionitrile	22.0%
Inert Ingredients:	56.0%
Total:	100.0%

2 1/2 Gallons
U.S. Standard Measure

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See directions for use
in attached booklet.

EPA Reg. No. 100-716

EPA Est. 100-LA-1

Cycle® trademark of Ciba-Geigy Corporation

Ciba Plant Protection
Ciba-Geigy Corporation
Greensboro, North Carolina 27419

CGA

Precautionary Statements

Hazards to Humans or Domestic Animals

CAUTION

This product may be hazardous to your health.

This product is classified "Restricted Use" because one of the active ingredients, cyanazine, at doses which caused severe maternal illness in laboratory animals, caused birth defects.

Keep out of reach of domestic animals, particularly cattle. Consumption of this product, spray solutions or water contaminated with this product can result in serious illness or possible death of bovines.

Harmful if swallowed, absorbed through skin, or inhaled. Causes eye irritation. Avoid breathing vapor or spray mist and contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

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 eyes with plenty of water. Call a physician if irritation persists.

If on skin: Wash with plenty of soap and water. Get medical attention.

If inhaled: Remove victim to fresh air. Get medical attention.

Note to Physician: There is no specific antidote. If swallowed, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal should be considered.

Environmental Hazards

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. **Cyanazine, one of the active ingredients in Cycle Herbicide, has been detected in surface waters that receive run-off from treated areas. To minimize cyanazine run-off, follow the Best Management Practices outlined in the Directions for Use section of this label.**

Groundwater and Surface Water Advisory

Cycle contains the active ingredients metolachlor and cyanazine.

Metolachlor has been identified in limited sampling of ground water and there is the possibility that it may leach through the soil to ground water, especially where soils are coarse and ground water is near the surface. Following application and during rainfall events that cause runoff, metolachlor may reach surface water bodies including streams, rivers and reservoirs.

Care must be taken when using this product to prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Check valves or antisiphoning devices must be used on all mixing equipment.

Cyanazine is a pesticide which can move (seep or travel) through soil and can contaminate ground water which may be used as drinking water. Cyanazine has been found in ground water 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 this product where the water table (ground water) 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 ground water.

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

Container Disposal - Do not reuse empty container. Triple rinse (or equivalent), puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. Keep out of smoke from burning containers.

[GANNONC.LABELC]CYCLEF6 - 12/17/93