SEP | 8 1995

American Cyanamid Co. P.O. Box 400 Princeton, NJ 08543

Dear Ms. Overnolt:

Subject: Minor Changes (207827)

CONTOUR Merbicide EPA Feg. No. 241-353

Your submission dated Sept. 9, 1995

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Europeide, and Rodenticide Act, as amended, is acceptable and a stamped copy is enclosed for your records.

Sincerely yours,

Robert J. Taylor Product Manager 25 Pungicide-Herbicide Branch Registration Division (H7505C)

Daclosure

		CONCURRENC	E\$	 	
SYMBOL					
SURNAME	 			 ,	
DATE					

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

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.

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USERS COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

CONTOUR™ herbicide

FOR USE IN FIELD CORN (Apply Only On IMI-Corn Hybrids)

ACCEPTED with COMMENTS In EPA Letter Dated

SEP 1 8 1995

Under the Federal Insecticide. Fundicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

ACTIVE INGREDIENT: 241-353 Ammonium salt of imazethapyr (\pm) -2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-INERT INGREDIENTS 63.10% *Equivalent to 4.12% (\pm)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3pyridinecarboxylic acid CONTOUR contains 3.38 pounds of active ingredient per gallon (3.0 pounds ai of atrazine and 0.38 pounds acid equivalent of imazethapyr)

EPA Reg. No. 241-353

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail).

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Trademarks of American Cyanamid Company

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED:

Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering syrup of ipecac. Do not induce vomiting or give

anything by mouth to an unconscious person.

IF INHALED:

Remove victim to fresh air. If not breathing, give artificial respiration,

preferably mouth-to-mouth. Get medical attention,

IF ON SKIN:

Wash with plenty of scap and water. Get medical attention.

IF IN EYES:

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

NOTE TO PHYSICIAN: There is no specific antidote for atrazine. If this product is ingested, induce emesis or lavage stomach. The use of an aqueous slurry of activated charcoal

may be considered.

In case of an emergency endangering life or property involving this product, call collect, day or night, area code 201-835-3100,

See Below for Additional Precautionary Statements

American Cyanamid Company Agricultural Products Division Crop Protection Chemicals Department Wayne, NJ 07470 ©1995

Net Contents: 2.5 gallon

(9.45 liters)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION!

Harmful if absorbed through skin. Avoid contact with skin and clothing. Wash thoroughly after handling Remove contaminated clothes and wash before reuse.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

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Applicators and other handlers (other than mixers and loaders) must wear:

- long-sleeved shirt and long pants
- chemical-resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils or nitrile rubber ≥ 14 mils or neoprene rubber ≥ 14 mils or polyvinyl chloride (PVC) ≥ 14 mils or viton ≥ 14 mils
- chemical-resistant footwear plus socks

Mixers and Loaders must wear:

- long-sleeved shirt and long pants
- chemical-resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils or nitrile rubber ≥ 14 mils or neoprene rubber ≥ 14 mils or polyvinyl chloride (PVC) ≥ 14 mils or viton ≥ 14 mils
- chemical resistant footwear plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product contains atrazine. Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e., well-drained.

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

This product may not be mixed/loaded or used within 50 feet of all wells, including abandoned wells, drainage wells, and sink holes. This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded takes and reservoirs. This product may not be applied aerially or by ground within 66 feet of the points where surface water runoff enters perennial or intermittent impounded takes 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.

Atrazine is toxic to 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. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters

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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.

This labeling must be in the possession of the user at the time of pesticide application.

Observe all cautions and limitations on this label and on the labels of products used in combination with CONTOUR herbicide. Do not use CONTOUR other than in accordance with the instructions set forth on this label. The use of CONTOUR not consistent with this label may result in injury to crops. Keep containers closed to avoid spills and contamination.

DO NOT apply this product through any type of irrigation system.

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, and 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), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) 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.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls
- chemical resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils or nitrile rubber ≥ 14 mils or neoprene rubber ≥ 14 mils or polyvinyl chloride (PVC) ≥ 14 mils or viton ≥ 14 mils chemical resistant footwear plus socks

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STORAGE AND DISPOSAL

PROHIBITIONS:

KEEP FROM FREEZING

DO NOT store below 32°F.

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by State and local authorities by burning. If burned, stay out of smoke.

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on research and field use. 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, herbicide resistant weed populations, or the use of, or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above. CYANAMID DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

BUYER'S EXCLUSIVE REMEDY AND AMERICAN CYANAMID'S EXCLUSIVE LIABILITY. WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF CONTOUR. In no case shall Cyanamid or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

American Cyanamid Company makes no other express or implied warranty, including other express or implied warranty of FITNESS or of MERCHANTABILITY.

USES WITH OTHER PRODUCTS (TANK-MIXES)

If this product is used in combination with any other product except as specifically recommended in writing by American Cyanamid Company, then American Cyanamid Company shall have no liability for any loss, damage or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by American Cyanamid Company, the liability of American Cyanamid Company shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the American Cyanamid Company product in such combination use, and in any event shall be limited to return of the account of the purchase price of the American Cyanamid Company product.

GENERAL INFORMATION

Apply CONTOUR herbicide only on selected field corn hybrids (IMI-Corn) warranted by the seed company to possess resistance/tolerance to direct applications of imazethapyr (PURSUIT®) herbicide. DO NOT apply CONTOUR to corn hybrids which lack resistance/tolerance to imazethapyr (PURSUIT) herbicide. Contact your seed supplier, chemical dealer or American Cyanamid to obtain information regarding IMI-Corn hybrids.

CONTOUR can be applied early preplant, preplant incorporated, preemergence, or postemergence on IMI-Corn hybrids. The application method of choice will depend on the anticipated weed spectrum and the preference of the applicator.

CONTOUR herbicide kills weeds by root and/or foliage uptake and rapid translocation to the growing points. Adequate soil moisture is important for optimum CONTOUR activity. When adequate soil moisture is present, CONTOUR will provide residual control of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Use of CONTOUR herbicide in accordance with label directions is expected to result in normal growth of rotational crops; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible. Under some conditions (such as heavy texture soil, high organic matter, low pH or low rainfall) CONTOUR may cause injury to subsequent planted crops. See the ROTATIONAL CROP GUIDELINE section of this label for recommended rotation intervals to sensitive crops.

Crops growing under stressful environmental conditions can exhibit various injury symptoms which may be more pronounced if herbicides are used. Corn plants treated with CONTOUR may exhibit yellowing on new growth. Such effects occur infrequently and are temporary. Normal growth and appearance should resume within 1 to 2 weeks.

Naturally occurring biotypes* of some of the weeds listed on this label may not be effectively controlled by this and/or other products with either the ALS/AHAS enzyme inhibiting mode of action or the photosynthesis inhibiting mode of action. Other herbicides with the ALS/AHAS enzyme inhibiting mode of action include the sulfonylureas (e.g. AccentTM, BasisTM, ClassicTM, ConcertTM, ExceedTM, PermitTM, PinnacleTM, etc.) the sulfonamides (e.g. BroadstrikeTM, etc.) and the pyrimidyl benzoate (e.g. StapleTM, etc.). Herbicides with the photosynthesis inhibiting mode of action include the triazine herbicides (e.g. atrazine, BladexTM, ExtrazineTM, SencorTM, etc.). If naturally occurring biotypes are present in a field which are resistant to one of the herbicides in this premix and are not controlled by the other mode of action herbicide in this premix, CONTOUR should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control.

- *A weed biotype is a naturally occurring individual within a given species that has a slightly different, but distinct genetic makeup from other plants.

Replanting: If replanting is necessary in a field previously treated with CONTOUR, the field may be replanted to IMI-Corn. Rework the soil no deeper than the treated zone. DO NOT apply a second treatment of CONTOUR.

MIXING INSTRUCTIONS

POSTEMERGENCE APPLICATIONS OF CONTOUR HERBICIDE REQUIRE ADDITION OF AN ADJUVANT AND A LIQUID FERTILIZER* SOLUTION.

I. ADJUVANTS

SURFACTANTS: Use a nonionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 1 quart per 100 gallons of spray solution.

OR

CROP OIL CONCENTRATE: Instead of a surfactant, a petroleum or vegetable seed oil based crop oil concentrate (such as SUN-IT IITM) may be used. SUN-IT II is recommended when weeds are under moisture or temperature stress. Use SUN-IT II, or other methylated seed oils, at the rate of 1.5 to 2 pints per acre (use the higher rate when weeds are at the maximum label size), or use a crop oil concentrate at 2 pints per acre.

AND

II. LIQUID FERTILIZER SOLUTION

Recommended nitrogen based fertilizers include liquid fertilizers (such as 28%N, 32%N or 10-34-0) at the rate of 1-2 quarts per acre. Use the higher rate when weeds are under moisture or temperature stress. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 2.5 pounds per acre.

Note: In case of a compatibility problem when mixing crop oil concentrate or methylated seed oil with this product and water, use of a phosphate-containing compatibility agent is recommended.

^{*} CONTOUR applications may be made with a non-ionic surfactant only (liquid fertilizer not required) in the states of Arkansas, Bootheel of Missouri, Tennessee, South Carolina, Louisiana, Mississippi, Alabama, and Georgia.

Fift the spray tank one-half to three-fourths full with clean water. Use a calibrated measuring device to measure the required amount of CONTOUR. Add CONTOUR to the spray tank while vigorously agitating. Proper agitation should provide a continuous rippling or rolling action across the solution surface. Use of sparge bars or jet agitation is recommended. Add adjuvants and fill the remainder of the tank with water. Maintain agitation while spraying to ensure a uniform spray mixture. An antifoaming agent may be added to the tank if needed.

DO NOT apply CONTOUR with liquid fertilizer as a carrier for postemergence applications.

When tank-mixing CONTOUR herbicide with recommended herbicides, add the other herbicides and other components in the following order, while agitating:

- 1. Fill spray tank 1/2 to 3/4 full with clean water.
- 2. Add soluble packet products and thoroughly mix.
- 3. Add WP (wettable powder), DG (dispersible granule), DF (dry flowable), or LF (liquid flowable) formulations.
- 4. Add CONTOUR and thoroughly mix.
- 5. Add aqueous solution products and thoroughly mix.
- 6. Add other EC (emulsifiable concentrate) products.
- 7. Add surfactant or crop oil to the spray tank.
- 8. Add liquid fertilizer.
- 9. While agitating, fill the remainder of the tank with water.

Compatibility Testing

To ensure compatibility of CONTOUR in liquid fertilizer (soil applications only) or in tankmixes with other herbicides and water, a jar compatibility test is recommended. Check compatibility using the following procedure:

- 1. Add 1 pint of carrier (liquid fertilizer or water) to each of 2, one quart jars with tight lids.
- 2. To one of the jars add 1/4 teaspoon of a phosphate-containing compatibility agent. Agitate the solution.
- 3. To both jars, add the appropriate amount of herbicide(s) in the following order: dry formulations (WP, DG, DF, LF, SG (soluble granule), CONTOUR, aqueous solutions, and EC's.

Approximate Herbicide Use Rates:

Dry Formulations: Add 1/4 teaspoon for every 2.5 ounces of product used per acre.

Liquid Formulations: Add 1/2 teaspoon for every pint of product used per acre.

4. After adding all ingredients to each jar, attach lids and invert jars 10 times to mix. Allow the mixture to stand for 15 minutes then look for signs of incompatibility such as separation or precipitate formation (flakes, crystals, films, etc.). Determine if the compatibility agent prevents incompatibility and use accordingly.

To avoid injury to sensitive crops, spray equipment used for CONTOUR applications must be drained and thoroughly cleaned with water before peing used to apply other products. See the "Environmental Hazards" section of this label for precautions concerning products containing atrazine.

When CONTOUR is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages should be exceeded. CONTOUR herbicide cannot be mixed with any product containing a label prohibiting such mixtures.

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SPRAYING INSTRUCTIONS

GROUND APPLICATIONS: Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. A spray pressure of 20 to 40 psi is recommended.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying CONTOUR to minimum or no-till IMI-Corn. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Adjust the boom height to ensure proper coverage of weed foliage (according to the manufacturer's recommendation). Use only flat-fan nozzles for postemergence applications.

Avoid overlaps when spraying.

DO NOT apply with ground equipment when wind velocity is greater than 10 mph, or when spray may be carried to sensitive crops. Sensitive crops include leafy vegetables, sugarbeets, red table beets and cotton.

AERIAL APPLICATIONS: Uniformly apply with properly calibrated aerial equipment in 5 or more gallons of water per acre. When applied POSTEMERGENCE, the addition of a non-ionic surfactant AND fertilizer solution are required for optimum weed control; apply a non-ionic surfactant at the rate of 1 quart per 100 gallons of spray mixture OR instead of a non-ionic surfactant, add a petroleum or vegetable based seed oil (such as SUN-IT IITM) at the rate of 1.25 gallons per 100 gallons of spray mixture AND a liquid fertilizer at the rate of 1 quart per acre.

To avoid injury to sensitive crops from drift, aerial applicators must adhere to the following SPECIAL AERIAL USE DIRECTIONS AND PRECAUTIONS.

- Nozzle height above ground must be a maximum of 10 feet.
- Nozzles must be pointed towards the rear of the aircraft. The downward angle of the nozzle should not be greater than 20 degrees.
- To minimize wing-tip vortex roll, nozzles or spray boom must not be located any closer to end of wing or rotor than three-fourths the distance from the center of the aircraft.
- Use a maximum spray pressure of 40 psi.
- A buffer zone must be established between the area to be sprayed and sensitive crops.
- DO NOT spray when wind velocity is greater than 5 mph. Coarse sprays (larger droplets) are less likely to drift.

Avoid applications to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

Applicator is responsible for any loss or damage which results from spraying CONTOUR in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regards to spraying.

DO NOT apply this product through any type of irrigation system.

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USE RATE (1-1/3 PINTS PER ACRE)

Apply CONTOUR at a broadcast rate of 1-1/3 pints per acre for all methods of application: early preplant, preplant incorporated, preemergence (including minimum and no-till), and postemergence. At this broadcast rate, one gallon of CONTOUR will treat 6 acres of IMI-Corn. This is equivalent to 0.063 lbs. imazethapyr and 0.5 lbs. atrazine active ingredient per acre.

NOTE: Only one application of CONTOUR herbicide may be made during the growing season.

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

CONTOUR HERBICIDE USE AREA (Not for use in California or New York)

DO NOT apply CONTOUR to IMI-Corn in North Dakota and in Minnesota north of state highway 210.

APPLICATION INSTRUCTIONS POSTEMERGENCE

CONTOUR is effective in controlling weeds in conservation tillage as well as i conventio al production systems. Apply CONTOUR herbicide as a postemergence treatment to IMI-Corn when crop and weeds are actively growing. Apply CONTOUR before weeds exceed a height of 3 inches, unless otherwise indicated and before corn reaches 12 inches in height. Delay application until the majority of the weeds are at the recommended growth stage. More restrictive crop growth stage limitations of tank-mix partners must be followed.

An adjuvant (either a surfactant or a crop oil concentrate) and a liquid fertilizer must be added to the spray solution for optimum weed control activity. See the ADDITIVE section under MIXING INSTRUCTIONS for specific instructions.

For maximum weed control, cultivate 7-10 days following a postemergence CONTOUR application. This timely cultivation will enhance residual weed control, especially under dry conditions.

If air temperatures reach or stay below 40°F for 10 or more hours, delay a CONTOUR application for 48 hours from the time temperatures increase above 40°F. Unusually cool temperatures (40°F or less) reduce photosynthesis and transpiration and thus reduce the uptake and translocation (and effectiveness) of CONTOUR in weeds.

CONTOUR herbicide should be applied a minimum of one hour before rainfall or overhead irrigation.

SOIL APPLICATIONS

CONTOUR can be applied as an early preplant, preplant incorporated, or preemergence treatment in IMI-Corn. CONTOUR provides effective weed control in conservation tillage systems designed to meet conservation compliance requirements. It can also be applied in conventional, minimum tillage and no-till production systems. The application method of choice will depend on the anticipated weed spectrum and the preference of the applicator.

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SOIL APPLICATIONS WITH LIQUID FERTILIZERS

CONTOUR can be applied to the soil in liquid fertilizers, alone or in combination with PROWL® 3.3 EC herbicide (preemergence only, DO NOT incorporate PROWL), Eradicane ExtraTM, Sutan+TM, Lasso ECTM, Lasso MTTM, Harness PlusTM, SurpassTM, or DualTM. Follow all CONTOUR herbicide label recommendations regarding incorporation, timing of application, special instructions and precautions. Apply treatments in 20 or more gallons of liquid fertilizer per acre with ground equipment.

Always test the compatibility of CONTOUR with the liquid fertilizer before mixing in the spray tank. (See Mixing Instructions for compatibility testing guidelines).

PREPLANT INCORPORATED APPLICATIONS

CONTOUR may be applied following land preparation and should be thoroughly incorporated to a depth of 1 to 2 inches. Application may be made up to 45 days prior to planting. Mechanical incorporation can be achieved by one of the following:

- (a) Disk harrow set to cut 3 to 4 inches deep and operated at 4 to 6 mph with the second pass at an angle to the first.
- (b) PTO-driven equipment (tillers, cultivators, hoes) set to cut 2 to 3 inches deep and operated one time at 4 mph or less.
- (c) Rolling cultivator set to cut 2 to 4 inches deep and operated two times at 6 to 8 mph with the second pass at an angle to the first. Use only on coarse textured soils.
- (d) Field cultivator with 3 or 4 rows of sweeps (Do not use chisel points), spaced at intervals of 7 inches or less and staggered so that no soil is left unturned, set to cut 3 inches deep, and operated two times at more than 5 mph with the second pass at an angle to the first.
- (e) LELY-ROTERRATM set and operated according to the manufacturer's directions to thoroughly incorporate CONTOUR to a depth of 1 to 3 inches.
- (f) Do-All set and operated according to the manufacturer's directions to incorporate CONTOUR herbicide 1 to 3 inches deep and operated at 4 to 6 mph.

If corn is planted on beds, apply and incorporate after bed formation using PTO-driven equipment or a rolling cultivator.

PREEMERGENCE (SURFACE APPLICATIONS)

CONTOUR offers flexibility in that it can be utilized in all production tillage systems. It can be applied prior to planting or at planting in conventional, reduced tillage or no-till production systems.

Adequate soil moisture is required for optimum activity. For surface applications, rainfall or overhead irrigation is necessary to move CONTOUR into the weed germination zone. The amount of rainfall or irrigation required following application depends on existing soil moisture, soil texture and organic matter content. Sufficient water to moisten the soil to a depth of 2 inches is normally adequate. If adequate moisture is not received within 7 days after a surface-applied treatment, then a cultivation is recommended to control escaped weeds.

When adequate moisture is received after dry conditions, CONTOUR will provide residual control of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

PREPLANT

CONVENTIONAL TILLAGE:

Apply CONTOUR herbicide treatments up to 45 days before planting, during planting, or after planting. If moisture is insufficient, a thorough shallow tillage (preferably with a rotary hoe) or cultivation is recommended to improve weed control.

NO-TILL OR REDUCED TILLAGE:

Apply CONTOUR treatments up to 45 days before planting, during planting, or after planting. To ensure thorough coverage, use a minimum of 20 gallons of water per acre. Use higher gallonage for fields with dense vegetation or heavy crop residues.

NOTE:

Adjust planters to ensure adequate seed coverage.

SEQUENTIAL HERBICIDE COMBINATIONS WITH CONTOUR HERBICIDE

CONTOUR FOLLOWING EARLY PREPLANT APPLICATIONS OF:

2,4-D

Gramoxone Extra™

Bicep™, Bicep Lite™

Harness Plus

Bronço™7

Lasso EC Lasso MT

Bullet™ Dual

Roundup™

Extrazine IITM

Surpass

Frontier™

Surpass 100TM

CONTOUR FOLLOWING PREPLANT INCORPORATED APPLICATION OF:

Atrazine

Harness Plus

Bicep, Bicep Lite

Lariat™

Bullet

Lasso EC, Lasso MT

Dual

Surpass

Eradicane Extra

Surpass 100

Extrazine II

Sutan+

Frontier

CONTOUR FOLLOWING PREEMERGENCE APPLICATION OF:

Atrazine

Extrazine II

Banvel™

Frontier

Bicep, Bicep Lite

Harness Plus

Bladex™ 4L

Lariat

Bladex 90DF

Lasso EC, Lasso MT

Bronco

MarksmanTM

Bullet Clarity[™] PROWL 3.3 EC Surpass

Dual

Surpass 100

14/120

TANK-MIX HERBICIDE COMBINATIONS WITH CONTOUR HERBICIDE

EARLY PREPLANT APPLICATION OF CONTOUR TANK-MIXED WITH:

2,4-D

Harness Plus

Bronco

Lasso EC, Lasso MT

Dual

Roundup

Frontier

Surpass

Gramoxone Extra

Surpass 100

PREPLANT INCORPORATED APPLICATION OF CONTOUR TANK-MIXED WITH:

Atrazine

Harness Plus

Bicep, Bicep Lite

Lariat

Bullet

Lasso EC, Lasso MT

Dual

Surpass

Eradicane Extra

Surpass 100

Extrazine II

Sutan+

Frontier

PREEMERGENCE APPLICATION OF CONTOUR TANK-MIXED WITH:

Atrazine

Extrazine II

Banvel

Frontier

Bicep, Bicep Lite

Harness Plus

Bladex 4L

Lariat

Bladex 90DF

Lasso EC, Lasso MT

Bronco

Marksman

Bullet

PROWL 3.3 EC

Clarity

Surpass

Dual

Surpass 100

POSTEMERGENCE APPLICATIONS OF CONTOUR TANK-MIXED WITH:

Accent^{TM1}

Lasso EC

Atrazine^{2,3}

Lasso MT

Dual Frontier PROWL 3.3 EC

¹If Accent is used in combination with CONTOUR on Pioneer imidazolinone-resistant (IR) corn, any registered soil insecticide applications may be used.

If imidazolinone-iolerant (IT) corn hybrids are used in combination with CONTOUR plus Accent tankmixes, DO NOT use COUNTER 15 G® insecticide. Other registered organophosphate insecticides such as COUNTER CR® (banded applications only) or THIMET® or other registered carbamate or pyrethroid insecticides may be used when CONTOUR plus Accent tankmixes are applied to IT corn hybrids. See the **PRECAUTIONS** section, page 19, for other insecticide use guidelines.

²In some cases the grass activity of CONTOUR will be reduced when used in combination with atrazine.

Some corn leaf burn may result with atrazine postemergence combinations with CONTOUR.

CONTOUR herbicide is active against many broadleaf and grass species. However, for long term weed management, alternate mode of action herbicides are recommended with CONTOUR. The application of a soil applied grass herbicide underlay will control grass weeds not on the CONTOUR label and enhance the control of certain broadleaf weeds such as common lambsquarters.

When CONTOUR herbicide is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages should be exceeded. CONTOUR cannot be mixed with any product containing a label prohibiting such mixtures.

CONTOUR WITH ADDITIONAL ATRAZINE AS A TANK-MIX OR SEQUENTIAL TREATMENT. CONTOUR is active on many broadleaf and grass weeds. However, under conditions of heavy or difficult to control weed pressure, CONTOUR may be tank-mixed or applied sequentially with additional atrazine. A total of 1.5 lbs active ingredient atrazine per acre or less (as local regulations require) may be added.

WEEDS CONTROLLED

When applied as directed at the broadcast rate of 1-1/3 pints per acre, CONTOUR herbicide will control or reduce competition from the weeds listed below.

NOTE: C = Control,

R = Reduced Competition

(The number under Maximum Leaf Stage indicates the MAXIMUM number of leaves at which weeds should be sprayed postemergence.

BR	OADLEAF WEEDS		
	SOIL APPLIED	POSTEME	RGENCE
Weeds Controlled (inches)		Maximum Leaf Stage	Size
Anoda, spurred	С	2	1-2
Artichoke, Jerusalem		8	6-10
Buffalobar	$^{\mathrm{c}^{*}}$		
Bristly starbur		2	1-2
Carpetweed	C		
Cocklebur, common	С	8	1-8
Eclipta	С	2	1-4
Galinsoga	C		
Jimsonweed	C^*	4	1-3
Kochia	C	4	1-3
Lambsquarters, common	C	2	1-2
Mallow, Venice	C	2	1-3
Marshelder	C	4	1-3
Morningglory			
entireleaf	R	2	1-2
ivyłeaf	B	2	1-2
pitted	R	2	1-2
smallflower	C	4	1-3
tall	R	2	1-2

BROADLEAF WEEDS (continued)

	SOIL APPLIED	POSTEMERGENCE	
Weeds Controlled		Maximum Leaf Stage	Size (inches)
Mustard sp.	С	4	1-3
Nightshade			
black	C	4	1-3
Eastern black	C	4	1-3
hairy	С	4	1-3
Pigweed			
palmer	С	8	1-8
redroot	С	8	1-8
smooth	С	8	1-8
spiny	C	8	1-8
Poinsettia, wild	C		
Puncturevine	C		
Purslane, common	С	2	1-3
Pusley, Florida	С		
Sida, prickly	Č C C*	2	1-3
Ragweed,			
common	С	4	1-3
giant	С	4	1-3
Sage, barnyard		R	1-3
Smartweed			
ladysthumb	С	4	1-3
Pennsylvania	С	4	1-3
Spurge			
prostrate	С	4	1-3
spotted	С	4	1-3
Sunflower	C^*	4	1-3
Velvetleaf	С	4	1-3
Thistle, Canada		R	1-3
Thistle, Russian	С	2	1-3
Waterhemp, tall	C	4	1-3

^{*} When CONTOUR is soil applied, these weeds are more consistently controlled by preplant incorporated treatments.

Do not count cotyledon leaves when determining weed stage of growth.

	GRASS WEEDS*	DACTEMED CONTAIN		
	SOIL APPLIED	POSTEMERGENCE		
Weeds Controlled**		Maximum Leaf Stage	Size (inches)	
Barnyardgrass	R	3	1-3	
Crabgrass,				
large	R	R	1-3	
smooth	R	R	1-3	
Cupgrass, woolly	R	R	1-3	
Foxtail,				
giant	C	6	1-6	
green	C	3	1-3	
yellow	C	3	1-3	
Goosegrass	R			
Johnsongrass,				
seedling	R	6	1-8	
rhizome		R	1-8	
Millet, wild proso	R	R	1-3	
Panicum,				
fall	R			
Texas	R			
Red rice		3	1-3	
Sandbur, field	Ŕ	R	<u><</u> l	
Shattercane	R	6	<u></u> 1-8	
Signalgrass, broadleaf	R	4	1-8	
Sorghum almum	R	6	1-3	
SEDGES				
Nutsedge				
purple	R	R	1-3	
yellow	R	R	1-3	

When CONTOUR is applied to grasses, preplant incorporated treatments are more consistent.

^{**}CONTOUR controls many grass species. However, when heavy grass pressure is anticipated, a soil applied grass herbicide underlay (such as DualTM, EradicaneTM, FrontierTM, HarnessTM, LassoTM, SurpassTM, or PROWL®) is recommended. DO NOT incorporate PROWL, apply preemergence or early postemergence only.

ROTATIONAL CROPS

The following rotational crops may be planted after applying CONTOUR at the recommended rate in corn. Planting earlier than the recommended interval may result in crop injury. See exceptions to the rotational crop guidelines.

1. Anytime

IMI-Corn

2. Eight and one-half months after CONTOUR application:

Field corn

Field corn grown for seed

3. Nine and one-half months after CONTOUR application:

Barley

Edible beans and peas (including lima beans and Southern peas)

Soybeans

Peanuts

Rye

Tobacco

Wheat

3. Eighteen months after CONTOUR herbicide application:

Alfalfa

Popcorn²

Cotton

Safflower

Lettuce

Sorghum

Oats

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Sweet corn²

4. Twenty six months after CONTOUR application:

Potatoes

5. Forty months after CONTOUR application**:

All crops not listed elsewhere in this ROTATIONAL CROP GUIDELINE.

**Following forty months after a CONTOUR application, and before planting any crop not listed elsewhere in the ROTATIONAL CROP GUIDELINE, a successful field bioassay must be completed. The field bioassay consists of a test strip of the intended rotational crop planted across the previously treated field and grown to maturity. The test strip should include low areas and knolls, and include variations in soil such as type and pH. If no crop injury is evident in the test strip, the intended rotational crop may be planted the following year.

If the field is limed to adjust pH prior to planting rotational crops not listed in the ROTATIONAL CROP GUIDELINE, apply the lime at least 12 months prior to planting the rotational crop.

EXCEPTIONS TO ROTATIONAL CROP GUIDELINES

¹Corn inbred lines: Corn inbred seed lines may be planted the year following an application of CONTOUR. Several seed companies have tested a wide range of inbreds for sensitivity to imazethapyr (an active ingredient in CONTOUR) soil residues and have reported good crop safety. However, due to the proprietary nature of seed production, American Cyanamid has not been given access to the inbred data. Growers are directed to contact the seed company for information and recommendations regarding the planting of corn grown for seed in fields treated with CONTOUR the previous year. Since growing conditions, environmental conditions, and grower practices are beyond the control of American Cyanamid Company, ALL RISKS AND CONSEQUENCES ASSOCIATED WITH PLANTING SEED CORN INBREDS INTO FIELDS TREATED PREVIOUSLY WITH CONTOUR SHALL BE ASSUMED BY THE USER.

²Sweet corn and popcorn varieties: (States of Iowa, Illinois, Indiana, Ohio, Wisconsin and Minnesota (south of Hwy. #210), only). Sweet corn and popcorn varieties may be planted the year following an application of CONTOUR. Some sweet corn and popcorn varieties may be injured when planted at less than 18 months following an application of CONTOUR herbicide. Before planting sweet corn for processing, contact the processor company for information, and recommendations regarding the tolerance of sweet corn varieties planned for fields treated with CONTOUR the previous year. DO NOT plant fresh market sweet corn varieties prior to 18 months after CONTOUR use. Before planting popcorn varieties, contact the popcorn company for information and recommendations regarding the tolerance of popcorn varieties planned for fields treated with CONTOUR the previous year. Since growing conditions, environmental conditions and grower practices are beyond the control of American Cyanamid Company, ALL RISKS AND CONSEQUENCES ASSOCIATED WITH PLANTING SWEETCORN OR POPCORN VARIETIES INTO FIELDS TREATED PREVIOUSLY WITH CONTOUR SHALL BE ASSUMED BY THE USER.

Stunting and maturity delay or other adverse effects may result when sweet corn or popcorn are planted following CONTOUR use.

Use of CONTOUR herbicide in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

PRECAUTIONS

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Only rotational crops harvested at maturity may be used for feed or food.

In the event of a crop loss due to weather, IMI-Corn hybrids can be replanted. If CONTOUR is tank-mixed with other herbicides, the most restrictive precautions must be followed.

There should be an interval of at least 45 days between an application of CONTOUR and corn harvest (silage, fodder, or grain). DO NOT graze or feed treated corn forage, silage, fodder, or grain for at least 45 days after an application of CONTOUR.

American Cyanamid recommends products containing imazethapyr (PURSUIT, PURSUIT® PLUS, RESOLVE SG) NOT be applied to IMI-corn the same year as CONTOUR or injury to follow crops may occur.

All soil insecticides, including labeled banded or in-furrow applications, may be used in combination with Pioneer imidazolinone resistant (IR) corn hybrids and CONTOUR.

Imidazolinone tolerant (IT) corn hybrids from other seed companies may occasionally exhibit injury symptoms when soil insecticides are used in combination with CONTOUR. Registered organophosphate soil insecticides may be used with CONTOUR on imidazolinone tolerant corn. DO NOT use COUNTER 15G soil insecticide, in-furrow, when CONTOUR will be applied to imidazolinone tolerant corn hybrids. COUNTER 15G and THIMET may be applied in a band and used in combination with CONTOUR on imidazolinone tolerant corn hybrids. COUNTER CR may be used in both banded and in-furrow applications and followed with CONTOUR applications. Other registered carbamate or pyrethroid insecticides may also be used in combination with CONTOUR applications. American Cyanamid has not tested all hybrids in which the imidazolinone tolerance trait is claimed and cannot be responsible for factors which are beyond its control, such as growing conditions, environmental conditions, grower practices and the specific genetics of each hybrid tolerance to herbicide and insecticide applications.

For additional information regarding the use of CONTOUR herbicide, call telephone no. (800) 942-0500.

American Cyanamid Company Agricultural Products Division Crop Protection Chemicals Department Wayne, New Jersey 07470 ©1995

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