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US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (75-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.
241-384

DATE OF ISSUANCE
MAR 17 1998

TERM OF ISSUANCE
Conditional

NAME OF PESTICIDE PRODUCT

AC 513,995 DG Herbicide

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

American Cyanamide Company
Agricultural Research Center
P.O. Box 400
Princeton, NJ 08543-0400

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

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

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

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

This product is registered in accordance with FIFRA Section

3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of this product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of this product under FIFRA sec. 4.
2. Add the phrase "EPA Registration No. 241-384" to the label before you release the product for shipment.
3. Add the following restriction to the Liquid Fertilizer Solution statements on page 7 of the label: "Do not use ammonium sulfate or any fertilizer containing ammonium sulfate as a spray adjuvant"; and delete the existing restriction that reads: "Do not apply with ammonium sulfate".
4. Add "Note to Physicians" under "Statement of Practical Treatment" section that reads: "Probable mucosal damage may contraindicate the use of gastric lavage."
5. Submit one (1) copy of the final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

Enclosure

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

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

Joanne I. Miller

DATE

MAR 17 1998

Best Image Available

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AC 513,995 DG Herbicide

FOR USE ON IMI-CORN® SEED HYBRIDS ONLY

ACTIVE INGREDIENTS:

Imazethapyr (+)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid.....	12.0%
Imazapyr (+) 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid	4.0%
Sodium salt of dicamba (3,6-dichloro- <i>o</i> -anisic acid).....	58.9%*
INERT INGREDIENTS	25.1%
TOTAL	100.0%

*Equivalent to 53.6% of 3,6 dichloro-*o*-anisic acid.

AC 513,995 in a water soluble bag.

(1 bag contains 0.084 pounds of imazethapyr, 0.028 pounds of imazapyr and 0.375 pounds of dicamba as the free acid.)

ACCEPTED
with COMMENTS
In EPA Letter Dated

EPA Reg. No. 241-

EPA Est. No.

MAR 17 1998

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

KEEP OUT OF REACH OF CHILDREN

DANGER!/PELIGRO!

241-384

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).

STATEMENT OF PRACTICAL TREATMENT

- IF IN EYES:** Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Get medical attention.
- IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if symptoms persist.
- IF SWALLOWED:** Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

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

Do not remove package from container except for immediate use.
See following pages for additional precautionary statements.

American Cyanamid Company
North America Agricultural Products Division
Crop Protection Products Department
One Campus Drive
Parsippany, NJ 07054 ©1998

Net Contents: 5 X 11.2 ounce packets.

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**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER!

Corrosive. Causes irreversible eye damage. Harmful if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Wear goggles or face shield. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- waterproof gloves
- shoes plus socks
- protective eyewear.

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.

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

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water, or areas where surface water is present, or to intertidal areas below the mean high water mark.

DO NOT contaminate water when disposing of equipment washwaters.

Imazethapyr has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

This product may not be mixed or loaded within 50 feet of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers, and natural or impounded lakes or reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, 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 specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

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

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

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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 AC 513,995. Do not use AC 513,995 other than in accordance with the instructions set forth on this label. The use of AC 513,995 not consistent with this label may result in injury to crops.

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. 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
- waterproof gloves
- shoes plus socks
- protective eyewear

STORAGE AND DISPOSAL

PROHIBITIONS: 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: DO NOT reuse outer packaging. Dispose of outer packaging in a sanitary landfill, or 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 AC 513,995. 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.

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 amount of the purchase price of the American Cyanamid Company product.

GENERAL INFORMATION

AC 513,995 can be applied postemergence (including spike stage) on IMI-CORN hybrids. Apply only on selected field corn hybrids (IMI-CORN) warranted by the seed company to possess resistance/tolerance to direct application of certain imidazolinone herbicides. DO NOT apply AC 513,995 to corn hybrids which lack resistance/tolerance to imidazolinone herbicides. Contact your seed supplier, chemical dealer or American Cyanamid to obtain information regarding IMI-CORN hybrids.

AC 513,995 kills weeds by root and/or foliar uptake and rapid translocation to the growing points. Adequate soil moisture is important for optimum AC 513,995 activity. When adequate soil moisture is present, AC 513,995 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 AC 513,995 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. Under some conditions (such as heavy texture soil, high organic matter, low pH or low rainfall) AC 513,995 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 AC 513,995 may exhibit yellowing on new growth. Applications of AC 513,995 during periods of rapid growth may result in temporary leaning or leaf curling. AC 513,995 applications should be made when the air temperature is less than 85°F to minimize these responses. 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 growth regulating mode of action. Other herbicides with the ALS/AHAS enzyme inhibiting mode of action include the sulfonylureas (e.g. Accent¹, Basis¹, Classic¹, Concert¹, Exceed², Permit³, Pinnacle¹, etc.), the sulfonamides (e.g. Broadstrike⁴, etc.), the pyrimidyl benzoates (e.g. Staple¹, etc.) and the imidazolinones (e.g. Pursuit®, Scepter®, etc.). Herbicides with the growth regulating mode of action include the benzoic acid herbicides (e.g. Banvel⁵, Clarity⁵, etc.), the phenoxy acid herbicides (e.g. 2,4-D, 2,4-DB, etc.) and the pyridine herbicides (e.g. Stinger⁴). 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, AC 513,995 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 AC 513,995, the field may be replanted only to IMI-CORN. Rework the soil no deeper than the treated zone. DO NOT apply a second treatment of AC 513,995.

MIXING INSTRUCTIONS

POSTEMERGENCE APPLICATIONS OF AC 513,995 REQUIRE THE ADDITION OF AN ADJUVANT AND A LIQUID FERTILIZER SOLUTION*.

I. ADJUVANTS

SURFACTANTS: Use a non-ionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 1 quart per 100 gallons of spray solution. An organo-silicone surfactant may be used in place of a non-ionic surfactant.

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. Do not apply with ammonium sulfate.

Fill the spray tank one-half to three-fourths full with clean water. Add the required amount of AC 513,995 to the spray tank while agitating. Add adjuvants and fill the remainder of the tank with water. An antifoam agent may be added if needed.

DO NOT use liquid fertilizer as a carrier (use water only) for postemergence applications of AC 513,995 herbicide.

SLURRY PREPARATION

AC 513,995 may be slurried prior to addition to the spray tank

- 1). Add 1 to 2 water soluble packets per gallon of clean water.
- 2). Allow water soluble bags to dissolve for 3-5 minutes or until bags have ruptured.
- 3). Agitate slurry for 10 -15 minutes or until water soluble bags are completely in solution.
- 4). Transfer slurry to spray tank (begin spray tank agitation) filled half to three quarters full with clean water.

TANK MIXTURE PREPARATION

When tank-mixing AC 513,995 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 AC 513,995 and thoroughly mix.
- 3). Add other aqueous solution products.
- 4). Add other soluble packet products and thoroughly mix.
- 5). Add WP (wetable powder), DG (dispersible granule), DF (dry flowable), or LF (liquid flowable) formulations.
- 6). Add EC (emulsifiable concentrate) products.
- 7). Add surfactant to the spray tank.
- 8). Add liquid fertilizer.
- 9). While agitating, fill the remainder of the tank with water.

*AC 513,995 applications may be made with a non-ionic surfactant only (liquid fertilizer not required) in the Bootheel of Missouri, Tennessee, South Carolina, Louisiana, and Georgia.

When AC 513,995 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. AC 513,995 cannot be mixed with any product containing a label prohibiting such mixtures.

PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of AC 513,995 herbicide or AC 513,995 tank mixes.

- 1) Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until all rinsc water is removed from the system.
- 2) Fill tank with water while adding 1 quart of household ammonia for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 3) Flush the solution out of the spray tank through the boom.
- 4) Remove the nozzles and screens and flush the system with two full tanks of water.

The steps listed below are suggested for thorough cleaning of spray equipment used to apply AC 513,995 herbicide as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water-dispersible formulations. AC 513,995 herbicide tank mixes with water-dispersible formulations require the use of a water/detergent rinse.

- 5) Complete step 1.
- 6) Fill tank with water while adding 2 lbs. of detergent for every 40 gallons of water. Operate pump to circulate the detergent solution through the sprayer system for 5 to 10 minutes and discharge a small amount of the solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3, and 4.

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. DO NOT apply when wind velocity is greater than 10 mph. (See SENSITIVE CROP PRECAUTIONS section on the next page for application guidelines near sensitive crops.)

To ensure thorough coverage a minimum of 10 gallons of water per acre is recommended when applying AC 513,995 herbicide to minimum till or no-till IMI-CORN. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Avoid overlaps when spraying.

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AERIAL APPLICATIONS: Uniformly apply with properly calibrated aerial equipment in 5 or more gallons of water per acre. 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 AND a liquid fertilizer at the rate of 1 quart per acre. (See directions under MIXING INSTRUCTIONS.) Do not apply with ammonium sulfate.

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.

Applicator is responsible for any loss or damage which results from spraying AC 513,995 in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

SENSITIVE CROP PRECAUTIONS

AC 513,995 herbicide may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sugar beets, sunflowers, tobacco, tomatoes and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to AC 513,995 herbicide during their development or growing stage. FOLLOW THE PRECAUTIONS LISTED BELOW WHEN USING AC 513,995 HERBICIDE.

- Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of AC 513,995 herbicide with roots of desirable plants such as trees and shrubs.
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of nearby sensitive crops. However, always make applications when there is some air movement to determine the direction and distance of possible spray drift. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles which are designed to produce minimal amounts of fine spray particles such as Spraying Systems XR flat fans. A spray pressure of 20 psi and spray volume at or above 20 gpa, are recommended to reduce drift to sensitive crops.
- Agriculturally approved drift-reducing additives may be used.
- Do not apply AC 513,995 herbicide in the vicinity of sensitive crops when the temperature on the day of application is expected to exceed 85°F as drift is more likely to occur.
- Do not use aerial equipment to apply AC 513,995 herbicide when sensitive crops and plants are growing in the vicinity of area to be treated.

- Do not apply AC 513,995 herbicide when soybeans are growing nearby if any of these conditions exist:
 - corn is more than 24 inches tall
 - soybeans are more than 10 inches tall
 - soybeans have begun to bloom
- To avoid injury to desirable plants, equipment used to apply AC 513,995 herbicide should be thoroughly cleaned (see PROCEDURE FOR CLEANING SPRAY EQUIPMENT) before reusing to apply any other chemicals.

USE RATE

Apply AC 513,995 at a broadcast rate of 5.6 ounces per acre. At this broadcast rate, one package of AC 513,995 will treat 2.0 acres of IMI-CORN.

NOTE: Only one application of AC 513,995 may be made during the growing season.

**AC 513,995 HERBICIDE USE AREA
(Not for use in California or New York)**

DO NOT apply AC 513,995 to IMI-CORN in North Dakota or in Minnesota north of state highway 210.

APPLICATION INSTRUCTIONS

AC 513,995 is effective in controlling weeds in conservation tillage as well as in conventional production systems. Apply AC 513,995 herbicide as a postemergence treatment to IMI-CORN when crop and weeds are actively growing. Apply AC 513,995 before weeds exceed a height of 4 inches, and before corn is 12 inches, unless otherwise indicated. 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.

A nonionic surfactant and a liquid fertilizer must be added to the spray solution for optimum weed control activity. See the MIXING INSTRUCTIONS section for specific instructions. Do not apply with ammonium sulfate.

For maximum weed control, cultivate 7-10 days following AC 513,995 application. This timely cultivation will enhance residual weed control, especially under dry conditions.

Delay a AC 513,995 application for 48 hours from the time temperatures increase above 40°F if air temperatures reach or stays below 40°F for 10 or more hours. Unusually cool temperatures (40°F or less) reduce photosynthesis and transpiration and thus reduce the uptake and translocation (and effectiveness) of AC 513,995 herbicide in weeds.

AC 513,995 should be applied a minimum of one hour before rainfall or overhead irrigation.

SEQUENTIAL HERBICIDE COMBINATIONS WITH AC 513,995 HERBICIDE

AC 513,995 controls many grass species. However, when heavy grass pressure is anticipated, a soil applied grass herbicide underlay (such as Dual², DoublePlay⁶, Eradicane⁶, Frontier⁵, Harness³, Lasso³, Surpass⁶, TopNotch⁶ or PROWL[®]) is recommended for increased residual control. DO NOT incorporate PROWL, apply preemergence or early postemergence only. AC 513,995 may also be used in sequential programs with registered burndown herbicides.

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TANK-MIX HERBICIDE COMBINATIONS WITH AC 513,995 HERBICIDE

Recommended Tank- Mix Postemergence Applications of AC 513,995 are:

Banvel*	Lasso EC
Dual	Lasso MT
Frontier	PROWL 3.3 EC

*In some cases the grass activity of AC 513,995 may be reduced when used in combination with Banvel.

AC 513,995 is active against many broadleaf and grass species. For long term weed management, AC 513,995 contains three herbicides with two different modes of action to reduce the potential for selecting tolerant weeds (resistant weeds).

When AC 513,995 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. AC 513,995 cannot be mixed with any product containing a label prohibiting such mixtures.

WEEDS CONTROLLED

When applied as directed at the broadcast rate of 5.6 ounces per acre, AC 513,995 herbicide will control or reduce competition from the weeds listed below.

NOTE: R = Reduced Competition

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

BROADLEAF WEEDS

Weeds Controlled	POSTEMERGENCE	
	Maximum Leaf Stage	Size (inches)
Alligator weed	4	1-3
Anoda, spurred	2	1-2
Artichoke, Jerusalem	8	6-10
Buckwheat, wild	4	1-3
Buffalobur	4	1-3
Bristly starbur	2	1-2
Carpetweed	4	1-3
Cocklebur, common	8	1-8
Jimsonweed	4	1-3
Knotweed	4	1-3
Kochia	4	1-3
Lambsquarters, common	4	1-3
Marshelder	4	1-3
Milkweed, honeyvine	4	1-3
Morningglory		
entireleaf	2	1-2
ivyleaf	4	1-3
pitted	2	1-2
smallflower	4	1-3
tall	4	1-3
Mustard spp.	4	1-3

BROADLEAF WEEDS (Continued)

Weeds Controlled	POSTEMERGENCE	
	Maximum Leaf Stage	Size (inches)
Nightshade		
black	4	1-3
Eastern black	4	1-3
hairy	4	1-3
Pigweed		
palmer	8	1-8
prostrate	8	1-8
redroot	8	1-8
smooth	8	1-8
spiny	8	1-8
Ragweed		
common	4	1-3
giant	4	1-3
Sage, barnyard	R	1-3
Sicklepod	4	1-3
Sida, prickly	4	1-3
Smartweed,		
ladysthumb	4	1-3
Pennsylvania	4	1-3
Spurge		
prostrate	4	1-3
spotted	4	1-3
Sunflower	4	1-3
Velvetleaf	4	1-3
Thistle, Canada	R	1-3
Waterhemp		
common	4	1-3
tall	4	1-3

DO NOT count cotyledon leaves when determining weed stage of growth.

GRASS WEEDS

Weeds Controlled	POSTEMERGENCE	
	Maximum Leaf Stage	Size (inches)
Barnyardgrass	3	1-3
Crabgrass		
large	3	1-3
smooth	3	1-3
Cupgrass, woolly	3	1-3
Foxtail		
giant	6	1-6
green	3	1-3
yellow	3	1-3
Goosegrass	3	1-3
Johnsongrass		
seedling	6	1-8
rhizome	R	1-8
Millet, wild proso	3	1-3
Panicum, fall	3	1-3
Quackgrass	R	1-3
Red rice	3	1-3
Sandbur, field	3	1-2
Shattercane	6	1-8
Signalgrass, broadleaf	4	1-8
Sorghum alnum	6	1-3
Witchgrass	3	1-3

SEDGES

Nutsedge		
purple	R	1-3
yellow	R	1-3

ROTATIONAL CROP GUIDELINE

The following rotational crops may be planted after applying AC 513,995 herbicide at the recommended rate in IMI-CORN. Planting earlier than the recommended interval may result in crop injury. See page 15 for exceptions to the rotational crops guideline.

1. Anytime
IMI-CORN
2. Four months after AC 513,995 application:
Rye
Wheat
3. Eight and one-half months after AC 513,995 application:
Field Corn
Field corn grown for seed^a
4. Nine and one-half months after AC 513,995 application:
Barley
Edible beans and peas
Peanuts
Soybeans
Tobacco
Alfalfa
5. Eighteen months after AC 513,995 application:
Cotton
Lettuce
Oats
Popcorn
Safflower
Sorghum
Sweet corn
6. Twenty six months after AC 513,995 application:
Potatoes
7. Forty months after AC 513,995 application***:
All crops not listed elsewhere in this ROTATIONAL CROP GUIDELINE

***Following forty months after a AC 513,995 application, and before planting any crop not listed 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, a rotational crop may be planted the following year.

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

EXCEPTIONS TO ROTATIONAL CROP GUIDELINE

If corn is furrow irrigated, till the soil prior to planting winter wheat or barley. The beds should be broken up and the soil mixed with tillage equipment set to cut 4-6 inches deep.

***Corn inbred lines:** Corn inbred seed lines may be planted the year following an application of AC 513,995. Several seed companies have tested a wide range of inbreds for sensitivity to imazethapyr (an active ingredient in AC 513,995) 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 AC 513,995 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 AC 513,995 SHALL BE ASSUMED BY THE USER.**

Use of AC 513,995 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 possible.

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PRECAUTIONS

In the event of a crop loss due to weather, IMI-CORN hybrids can be replanted following an application of AC 513,995 herbicide. If AC 513,995 was tank-mixed with other herbicides, the label restrictions for these herbicides must also be followed.

There must be an interval of at least 45 days between an application of AC 513,995 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 AC 513,995.

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

American Cyanamid recommends products containing imazethapyr (CONTOUR[®], PURSUIT, PURSUIT PLUS, RESOLVE[®]) NOT be applied to IMI-CORN the same year as AC 513,995 because of potential injury to following crops may occur and residue limits may be exceeded.

All soil insecticides, including labeled banded or in-furrow applications, may be used in combination with Pioneer imidazolinone resistant (IR) corn hybrids and AC 513,995.

Imidazolinone tolerant (IT) corn hybrids from seed companies may occasionally exhibit injury symptoms when soil insecticides are used in combination with AC 513,995. Registered organophosphate soil insecticides may be used with AC 513,995 on imidazolinone tolerant corn. DO NOT use COUNTER[®] 15G soil insecticide, when AC 513,995 will be applied to imidazolinone tolerant corn hybrids. COUNTER[®] CR and THIMET[®] may be applied in a band only and used in combination with AC 513,995 on imidazolinone tolerant corn hybrids. Other registered carbamate or pyrethroid insecticides may also be used in combination with AC 513,995 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.

This label must be in the possession of the user at the time of herbicide application.

For additional information regarding the use of AC 513,995 herbicide, call telephone no. (800) 942-0500.

American Cyanamid Company
North America Agricultural Products Division
Crop Protection Products Department
One Campus Drive
Parsippany, NJ 07054 ©1998

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