

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (771-567)
WASHINGTON, D.C. 20460

EPA REGISTRATION NO.

241-369

DATE OF ISSUANCE

DEC 11 1995

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION

(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

TERM OF ISSUANCE

NAME OF PESTICIDE PRODUCT

Imazaquin/Imazethapyr DG

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

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

pin 25

241-369

1-8 28

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

1. Submit/cite all data required for registration/reregistration of your product under FIFRA Section 3(c)(5) and sec. 4 when the Agency requires all registrants of similar products to submit such data.

2. Make the labeling changes listed below before you release the product for shipment:

a. Add the phrase "EPA Registration No. 241-369" to your label before you release the product for shipment.

3. Submit five (5) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, this registration will be subject to cancellation in accordance with FIFRA sec. 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.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

DEC 11 1995

ACCEPTED
~~with COMMENTS~~
In EPA Letter Dated

IMAZAQUIN/IMAZETHAPYR DG
herbicide

DEC 11 1995

FOR USE IN SOYBEANS

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

241-369

ACTIVE INGREDIENTS:

Imazaquin (2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-quinoline - carboxylic acid)	35.0%
Imazethapyr (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3- pyridinecarboxylic acid	35.0%
INERT INGREDIENTS	30.0%
TOTAL	100.0%

Imazaquin/Imazethapyr DG in a water soluble bag.

1 pound of IMAZAQUIN/IMAZETHAPYR contains 0.35 pounds active ingredient
of imazaquin and 0.35 pounds active ingredient of imazethapyr

EPA Reg. No. 241-

EPA Est. No.

KEEP OUT OF REACH OF CHILDREN

WARNING!/AVISO!

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 a steady, gentle stream of water for 15 minutes. Call a physician if irritation persists.
- IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.
- IF SWALLOWED:** Drink promptly a large quantity of milk, egg white, gelatin solution, or, if these are not available, 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 Additional Precautionary Statements Inside

AMERICAN CYANAMID COMPANY
AGRICULTURAL PRODUCTS DIVISION
CROP PROTECTION CHEMICALS DEPARTMENT
WAYNE, NJ 07470 ©1994

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS

WARNING!

Causes substantial but temporary eye injury. Avoid contact with skin, eyes, or clothing. Harmful if absorbed through skin.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear:

- * Long-sleeved shirt and long pants
- * Waterproof gloves
- * Shoes plus socks
- * Protective eyewear

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.

User Safety Recommendations:

Users should:

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

ENVIRONMENTAL HAZARDS

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 contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE

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

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 IMAZAQUIN/IMAZETHAPYR DG. DO NOT use IMAZAQUIN/IMAZETHAPYR DG other than in accordance with the instructions set forth on this label. The use of IMAZAQUIN/IMAZETHAPYR DG not consistent with this label may result in injury to crops. Keep container closed to avoid spills and contamination.

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

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift.

PROPOSED IMAZAQUIN/IMAZETHAPYR DG LABEL

Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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
- * 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 disposal facility.

CONTAINER DISPOSAL FOR OUTER PACKAGING: Triple rinse (or equivalent); then offer for recycling or reconditioning, or dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

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PROPOSED IMAZAQUIN/IMAZETHAPYR DG LABEL

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 IMAZAQUIN/IMAZETHAPYR DG. 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 a 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 product.



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PROPOSED IMAZAQUIN/IMAZETHAPYR DG LABEL

GENERAL INFORMATION

IMAZAQUIN/IMAZETHAPYR DG is a uniquely flexible broad-spectrum herbicide which may be applied preplant incorporated, preplant surface, preemergence or postemergence in soybeans. The application method of choice will depend on the anticipated weed spectrum and the preference of the applicator.

When IMAZAQUIN/IMAZETHAPYR DG is applied to the soil, susceptible weeds emerge, growth stops, and then the weeds either die or are not competitive with the crop.

When IMAZAQUIN/IMAZETHAPYR DG is applied postemergence, absorption occurs through both the foliage and roots. Susceptible weeds stop growing and either die or are not competitive with the crop.

A timely cultivation may aid in the control of certain weeds or improve general weed control when adequate moisture is not received after application. Cultivation should be shallow. After postemergence treatments, wait at least 10 days before cultivating.

The mode of weed killing activity involves uptake of IMAZAQUIN/IMAZETHAPYR DG by weed roots and/or foliage and rapid translocation to growing points. Therefore, adequate soil moisture is important for optimum IMAZAQUIN/IMAZETHAPYR DG activity. 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 treatment, then a cultivation or postemergence herbicide application may be needed to improve weed control. When adequate moisture is received after dry conditions, IMAZAQUIN/IMAZETHAPYR DG 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.

Occasionally, internode shortening of soybean plants may be observed with IMAZAQUIN/IMAZETHAPYR DG applications. This has no effect on soybean yields.

Following the use of this product and chemically related products with the same mode of action, naturally occurring biotypes* of some of the weeds listed on this label cannot be effectively controlled by this and related products. This product should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control of resistant biotypes.

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

See your Cyanamid representative for additional information.

PRECAUTIONS: DO NOT use on crops other than soybeans. Crops other than soybeans, such as cotton, corn and vegetables, may be injured by spray drift or other indirect contact with IMAZAQUIN/IMAZETHAPYR DG.

To avoid injury to sensitive crops from spray drift, follow all use directions and precautions in SPRAYING INSTRUCTIONS on pages 18 & 19.

DO NOT use IMAZAQUIN/IMAZETHAPYR DG other than in accordance with the instructions set forth on this label.

To avoid injury to sensitive crops, spray equipment used for IMAZAQUIN/IMAZETHAPYR DG applications must be drained and thoroughly cleaned with water before being used to apply other products to these crops. See pages 20 & 21 for ROTATIONAL CROP RESTRICTIONS.

IMAZAQUIN/IMAZETHAPYR DG should be made before soybean bloom.

There must be an interval of at least 90 days between the last IMAZAQUIN/IMAZETHAPYR DG application and soybean harvest.

DO NOT graze or feed treated soybean forage, hay or straw to livestock.

Use of IMAZAQUIN/IMAZETHAPYR DG 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, crop injury, is always possible. See pages 20 & 21 for ROTATIONAL CROP RESTRICTIONS.

Replanting: If replanting is necessary in a field previously treated with IMAZAQUIN/IMAZETHAPYR DG, the field may be replanted to soybeans. Rework the soil no deeper than the treated zone. DO NOT apply a second treatment of IMAZAQUIN/IMAZETHAPYR DG.

PROPOSED IMAZAQUIN/IMAZETHAPYR DG LABEL

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USE AREA

IMAZAQUIN/IMAZETHAPYR DG can be applied only in the states or parts of states shaded in the following map:



USE REGION 1 includes eastern Oklahoma, Arkansas, the Missouri bootheel, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and eastern Texas.

USE REGION 2 includes eastern Kansas (east of U.S. 81; the counties of Cloud, Ellsworth, Harvey, Jewell, Lincoln, Mitchell, McPherson, Ottawa, Republic, Saline, Sedgewick, and Sumner), southeastern Nebraska (east of U.S. 81, south of U.S. 34), Missouri, Illinois (south of S.R. 116 west of Peoria; south of U.S. 24 east of Peoria), Indiana, southern Iowa (counties of Mills, Fremont, Montgomery, Page, Adams, Taylor, Union, Ringgold, Clarke, Decatur, Lucas, Wayne, Monroe, Appanoose, Wapello, Davis, Jefferson, Van Buren, Henry, Lee, and Des Moines), Ohio, Michigan, Kentucky, Virginia, West Virginia, Pennsylvania, Maryland, Delaware, and New Jersey.

USE REGION 3 includes Nebraska (east of U.S. 81, north of U.S. 34 and also that area east of U.S. 283, south of U.S. 30, and west of U.S. 81), South Dakota (east of U.S. 81), Illinois (north of S.R. 116 west of Peoria; north of U.S. 24 east of Peoria), Wisconsin, Iowa (those counties not in USE REGION 2), and Minnesota (south of S.R. 210).

Note: See the **ROTATIONAL CROP RESTRICTIONS** section for recommendations applying to each Use Region.

APPLICATION RATE

2.8 OUNCES PER ACRE

14 Ounce Water Soluble Bag

Apply IMAZAQUIN/IMAZETHAPYR DG at a broadcast rate of 2.8 ounces per acre for all application methods (including minimum and no-till systems). At this broadcast rate, one 14 ounce soluble bag of IMAZAQUIN/IMAZETHAPYR DG will treat 5 acres of soybeans.

2.8 Ounce Water Soluble Bag

Apply IMAZAQUIN/IMAZETHAPYR DG at a broadcast rate of 2.8 ounces per acre for all application methods (including minimum and no-till systems). At this broadcast rate, one 2.8 ounce soluble bag of IMAZAQUIN/IMAZETHAPYR DG will treat 1 acre of soybeans.

NOTE: In Use Region 3 as defined by the Use Area section of this label, apply IMAZAQUIN/IMAZETHAPYR DG prior to July 1.

NOTE: Only one application of IMAZAQUIN/IMAZETHAPYR DG may be made during the season.

WEEDS CONTROLLED

When applied as directed, IMAZAQUIN/IMAZETHAPYR DG will control or reduce competition from the weeds listed below. Refer to the MIXING INSTRUCTIONS section for recommendations when weeds are at the maximum recommended growth stage or are under stress.

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).

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Weeds Controlled	SOIL APPLIED	POSTEMERGENCE	
		Maximum Leaf Stage	Size (inches)
<u>BROADLEAF WEEDS</u>			
Alligator weed		4	1-3
Anoda, spurred	C	2	1-2
Artichoke, Jerusalem		8	6-10
Buffalobur	C ¹	R	1-3
Bristly starbur		2	1-2
Carpetweed	C		
Cocklebur, common	C	8	1-8
Galinsoga	C		
Jimsonweed	C ¹	4	1-3
Kochia	C	4	1-3
Lambsquarters, common	C	R	1-2
Mallow, Venice	R		
Marshelder	C	4	1-3
Morningglory			
entireleaf	R	2	1-2
ivyleaf	R	2	1-2
pitted	R	2	1-2
smallflower	C	4	1-3
tall	R	2	1-2
Mustard sp.	C	4	1-3
Nightshade			
black	C	4	1-3
Eastern black	C	4	1-3
hairy	C	4	1-3
Pigweed			
redroot	C	8	1-8
smooth	C	8	1-8
spiny	C	8	1-8
Poinsettia, wild	C		
Puncturevine	C		
Purslane, common	C		
Pusley, Florida	C		
Sida, prickly	C ¹		
Ragweed,			
common	C	4	1-3
giant ²	C	4	1-3
Sage, barnyard		R	1-3
Smartweed			
ladysthumb	C	4	1-3
Pennsylvania	C	4	1-3
Spurge			
prostrate	C	4	1-3
spotted	C	4	1-3
Sunflower	C ¹	4	1-3
Velvetleaf	C ¹	4	1-3
Thistle, Canada		R	1-3
Waterhemp, tall	C	4	1-3

PROPOSED IMAZAQUIN/IMAZETHAPYR DG LABEL

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Weeds Controlled	SOIL APPLIED	POSTEMERGENCE	
		Maximum Leaf Stage	Size (inches)
<u>GRASS WEEDS</u>¹			
Barnyardgrass	R	3	1-3
Crabgrass,			
large	R	3	1-3
smooth	R	3	1-3
Com. volunteer ³	R	6	1-10
Cupgrass, woolly		3	1-3
Foxtail,			
giant	C	6	1-6
green	C	3	1-3
yellow	C	3	1-3
Goosegrass	R		
Johnsongrass,			
seedling	C	6	1-8
rhizome		R	6-12
Millet, wild proso	R	R	1-3
Panicum,			
fall	R		
Texas	R		
Red rice		3	1-3
Shattercane	R	6	1-8
Signalgrass, broadleaf	R	4	1-8
Sorghum, alnum	R	6	1-3
<u>SEDGES</u>			
Nutsedge			
purple	R	R	1-3
yellow	R	R	1-3

¹ To obtain consistent control or suppression of these weeds under a wide range of environmental conditions, a preplant incorporated application is required.

² Some broadleaf weeds such as giant ragweed germinating deep in the soil or with subsequent flushes may require a cultivation or post-emergence herbicide application for season long control.

³ IMAZAQUIN/IMAZETHAPYR DG will control or suppress only those field corn hybrids which DO NOT possess tolerance or resistance to IMAZAQUIN/IMAZETHAPYR DG or other imidazolinone herbicides (i.e. PURSUIT®).

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

IMAZAQUIN/IMAZETHAPYR DG is active against many broadleaf and grass species. However, when heavy grass pressure is anticipated, IMAZAQUIN/IMAZETHAPYR DG should be used in combination with a registered soil-applied grass herbicide (See HERBICIDE COMBINATIONS section).

Apply when weeds are actively growing. DO NOT apply IMAZAQUIN/IMAZETHAPYR DG post-emergence when soybeans and weeds have been subjected to stress conditions such as temperature and moisture extremes.

CONVENTIONAL, MINIMUM, AND NO-TILL APPLICATION INSTRUCTIONS

SOIL APPLICATIONS

IMAZAQUIN/IMAZETHAPYR DG may be applied in conventional, minimum, or no-till soybeans as a preplant surface, preplant incorporated, or preemergence surface application. Preplant incorporated and early preplant applications may be made up to 45 days (30 days in Use Region 1) before planting. Preemergence applications may also be applied during or after planting but before the crop emerges.

Adequate moisture is required for activation of IMAZAQUIN/IMAZETHAPYR DG.

PREPLANT INCORPORATED APPLICATIONS

Apply IMAZAQUIN/IMAZETHAPYR DG before planting and incorporate uniformly into the top 1 to 2 inches of soil. Avoid deeper incorporation or reduced weed control and/or crop injury may result. IMAZAQUIN/IMAZETHAPYR DG may be applied immediately before planting or up to 45 days (30 days in Use Region 1) prior to planting.

If soybeans are planted on beds, apply and incorporate after bed formation using PTO-driven equipment or rolling cultivator. Maintain IMAZAQUIN/IMAZETHAPYR DG in the surface 1 to 2 inches of the finished beds.

PREPLANT AND PREEMERGENCE SURFACE APPLICATIONS (including no-till)

Apply IMAZAQUIN/IMAZETHAPYR DG up to 45 days (30 days in Use Region 1) before, during or after planting but before the crop emerges. As with other herbicides applied preemergence, rainfall or irrigation is necessary to activate IMAZAQUIN/IMAZETHAPYR DG in the soil. If sufficient rainfall or irrigation to activate IMAZAQUIN/IMAZETHAPYR DG is not received within 7 days after application, a thorough shallow tillage, cultivation, or postemergence treatment may be required for control of emerged weeds.

POSTEMERGENCE APPLICATIONS

IMAZAQUIN/IMAZETHAPYR DG is effective in controlling weeds in conservation tillage as well as in conventional production systems. Apply IMAZAQUIN/IMAZETHAPYR DG herbicide as an early postemergence treatment when weeds are actively growing and before they exceed a height of 3 inches, unless otherwise indicated. Delay application until the majority of the weeds are at the recommended growth stage. Application timing should be based on weed size and not crop growth stage.

IMAZAQUIN/IMAZETHAPYR DG applied postemergence not only controls the emerged weed species listed previously, but can also provide residual control of susceptible weeds that may emerge after application. Application should be made to small soybeans so more herbicide reaches the soil surface. The level of residual control will depend on weed density and canopy closure which affect the amount of IMAZAQUIN/IMAZETHAPYR DG reaching the soil surface and environmental conditions, such as rainfall, at the time of and following application.

Apply IMAZAQUIN/IMAZETHAPYR DG to crops and weeds that are actively growing. If air temperatures reach or stay below 40° for 10 or more hours, delay a IMAZAQUIN/IMAZETHAPYR DG application for 48 hours from the time temperatures increase above 40° or until weeds are actively growing. Unusually cool temperatures (40° or less) reduce photosynthesis and transpiration. This reduces the uptake and translocation (and effectiveness) of IMAZAQUIN/IMAZETHAPYR DG in weeds.

To maximize weed control following a postemergence IMAZAQUIN/IMAZETHAPYR DG application, wait at

least 10 days before cultivating. This timely cultivation will enhance residual weed control, especially under dry conditions.

POSTEMERGENCE APPLICATIONS OF IMAZAQUIN/IMAZETHAPYR DG REQUIRE ADDITION OF AN ADJUVANT AND A LIQUID FERTILIZER SOLUTION.

I. ADJUVANTS

SURFACTANTS: Use a non-ionic or organo-silicone surfactant. The nonionic surfactant should contain at least 80% active ingredient and should be applied at a rate of 2 pints per 100 gallons of spray mixture. The organo-silicone surfactant should be applied at a rate of at least 1 pint per 100 gallons of water. Refer to the specific surfactant label for more specific use instructions.

OR

CROP OIL CONCENTRATE: Instead of a surfactant, a petroleum or vegetable seed based oil concentrate (such as SUN-IT II¹) 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 lbs per acre.

Note: Liquid fertilizer solutions are not required in IMAZAQUIN/IMAZETHAPYR DG applications in use areas south of Interstate highway 49.

There must be an interval of at least 90 days between the last IMAZAQUIN/IMAZETHAPYR DG application and soybean harvest.

IMAZAQUIN/IMAZETHAPYR DG should be applied a minimum of one hour before rainfall or overhead irrigation.

If IMAZAQUIN/IMAZETHAPYR DG is applied prior to emergence of the crop, and weeds exceed the recommended size, a contact herbicide should be added to IMAZAQUIN/IMAZETHAPYR DG to enhance control (See HERBICIDE COMBINATIONS section).

HERBICIDE COMBINATIONS

NO-TILL/REDUCED-TILL SYSTEMS

For no-till uses, IMAZAQUIN/IMAZETHAPYR DG may be tank mixed with Gramoxone Extra², Roundup³, 2,4-D (early preplant - see 2,4-D label for restrictions), or 2,4-DB to kill existing vegetation. Gramoxone Extra, Roundup, 2,4-D, or 2,4-DB should be deleted from the tank mixture if vegetation is absent at the time of application. IMAZAQUIN/IMAZETHAPYR DG may also be tank mixed with Bronco³, a product which gives both preemergence control of annual grasses and postemergence control of existing vegetation. IMAZAQUIN/IMAZETHAPYR DG may also be applied as a sequential preemergence or postemergence treatment following use of these herbicides.

Use a minimum of 20 gallons of water per acre. Use higher gallonage for fields with dense vegetation or heavy crop residues. Use ground equipment only. Plant soybeans at least one inch deep and adjust planters to ensure adequate seed coverage.

GRASS WEEDS

SOIL APPLIED COMBINATIONS

A soil treatment of IMAZAQUIN/IMAZETHAPYR DG is active against many grass species, but for maximum grass control IMAZAQUIN/IMAZETHAPYR DG should be tank mixed with PROWL® 3.3EC herbicide, trifluralin, Frontier⁴, Lasso⁵ or Dual⁶. IMAZAQUIN/IMAZETHAPYR DG may also be applied as a sequential preemergence or postemergence treatment following application of one of the above grass herbicides.

**ADDITIONAL WEEDS CONTROLLED
BY COMBINATION TREATMENTS**

When applied as directed, IMAZAQUIN/IMAZETHAPYR DG preplant incorporated or preemergence combination treatments with PROWL 3.3EC, trifluralin, Frontier, Lasso or Dual will control, as indicated, weeds listed in the following table in addition to those controlled by IMAZAQUIN/IMAZETHAPYR DG alone.

WEED	PROWL 3.3EC	Trifluralin^a	Frontier	Lasso	Dual
GRASSES					
BARNYARDGRASS	X	X	X	X	X
CRABGRASS, SMOOTH	X	X	X	X	X
CRABGRASS, LARGE	X	X	X	X	X
CROWFOOT GRASS	X	X			
CUPGRASS, SOUTHWESTERN			X		X
GOOSEGRASS	X	X	X	X	X
PANICUM, FALL	X	X ^c	X	X	X
PANICUM, TEXAS	X	X			
RICE, RED			X ^d	X ^a	X ^e
SANDBUR, FIELD	X	X			
SHATTERCANE	X ^{a,b}	X ^c			
SIGNALGRASS	X	X	X	X	X
WITCHGRASS	X	X	X	X	X
BROADLEAF WEEDS					
CARPETWEED	X	X	X	X	X
GALINSOGA				X	X
KOCHIA	X	X			
PURSLANE	X	X	X	X	
SPURGE, ANNUAL	X				
SPURGE, NODDING			X		

PROPOSED IMAZAQUIN/IMAZETHAPYR DG LABEL

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WEED	PROWL 3.3EC	Trifluralin ^a	Frontier	Lasso	Dual
SEDGES					
NUTSEDGE, YELLO V			X ^d	X ^a	X
RICE FLATSEDGE			X		

^aPreplant incorporated treatments only.

^bIf shattercane will be present, refer to PROWL label for special use instructions.

^cIf fall panicum or shattercane will be present, refer to trifluralin label for higher rates to control these weeds.

^dIf red rice or yellow nutsedge will be present, refer to Frontier label for higher rates to control these weeds.

^eIMAZAQUIN/IMAZETHAPYR DG plus Dual will provide suppression of red rice.

GRASS WEEDS

POST APPLIED COMBINATIONS

IMAZAQUIN/IMAZETHAPYR DG may be tank mixed with selective postemergence grass herbicides registered for use in soybeans such as Select⁷, Poast Plus⁸, Fusilade 2000⁹, Fusion⁹, Assure¹⁰ or Option¹¹. These selective grass herbicides may also be applied following a soil application and prior to or following a post application of IMAZAQUIN/IMAZETHAPYR DG. For best results use SUN-IT II or a crop oil concentrate AND liquid fertilizer with grass herbicide tank-mixtures.

In some cases the activity of the grass herbicide may be reduced when mixed with IMAZAQUIN/IMAZETHAPYR DG. The reduction in activity may be overcome by delaying the application of the postemergence grass herbicide 7 days following the application of IMAZAQUIN/IMAZETHAPYR DG. If the grass herbicide is applied first, wait 3 days before applying IMAZAQUIN/IMAZETHAPYR DG. Refer to the respective grass herbicide label for recommended application rate, weed size and restrictions.

BROADLEAF WEEDS

SOIL AND POST APPLIED COMBINATIONS

IMAZAQUIN/IMAZETHAPYR DG may be soil applied in tank mix combination with metribuzin (Sencor¹² or Lexone¹³) plus one of the following grass herbicides: PROWL 3.3EC, trifluralin, Frontier, Lasso, Dual, either preplant incorporated or preemergence (excluding trifluralin). IMAZAQUIN/IMAZETHAPYR DG may also be applied in tank mix with any one of the above grass herbicides as a preplant incorporated application followed by a preemergence application of Sencor or Lexone. For preemergence applications, apply during or immediately after planting. These treatments will control Florida beggarweed, hemp sesbania, hophornbeam copperleaf and sicklepod in addition to the weeds controlled by a soil application of IMAZAQUIN/IMAZETHAPYR DG plus the grass herbicide.

IMAZAQUIN/IMAZETHAPYR DG may be tank mixed with a selective postemergence broadleaf herbicide registered for use in soybeans such as Basagran¹⁴, Blazer¹⁴, Cobra¹⁵, Galaxy¹⁶, Storm¹⁶ or Reflex¹⁷. A soil or post applied IMAZAQUIN/IMAZETHAPYR DG application may be followed by SCEPTER[®] O.T.[®] in addition to the above mentioned broadleaf herbicides. For best results use SUN-IT II or a crop oil concentrate AND liquid fertilizer with broadleaf herbicide tank-mixtures.

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When IMAZAQUIN/IMAZETHAPYR DG 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. IMAZAQUIN/IMAZETHAPYR DG cannot be mixed with any product containing a label prohibiting such mixtures.

MIXING INSTRUCTIONS

Fill the spray tank one-fourth to one-half full with clean water. While agitating add the required amount of IMAZAQUIN/IMAZETHAPYR DG (including the water soluble packaging) and then fill the remainder of the tank with water.

For postemergence applications, add the nonionic or organo-silicone surfactant or the crop oil concentrate as last ingredient in the tank. An antifoaming agent may be added to the tank if needed. Maintain agitation while spraying to ensure a uniform spray mixture.

If other herbicides are tank-mixed with IMAZAQUIN/IMAZETHAPYR DG; while agitating, add components in the following order:

- 1) Fill spray tank 1/4 to 1/2 full with clean water.
- 2) Add IMAZAQUIN/IMAZETHAPYR DG and thoroughly mix.
- 3) Add soluble packet products and thoroughly mix.
- 4) Add WP (wettable powder), DG (dispersible granule), DF (dry flowable) or liquid flowable formulations not in soluble packets.
- 5) Add other aqueous solution products.
- 6) Add 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.

SOIL APPLICATIONS WITH LIQUID FERTILIZERS

IMAZAQUIN/IMAZETHAPYR DG can be applied to the soil in liquid fertilizers, alone or in combination with PROWL 3.3EC, trifluralin, Frontier, Lasso, Dual, or metribuzin.

DO NOT add IMAZAQUIN/IMAZETHAPYR DG ECO-PAK packets directly into liquid fertilizer. If IMAZAQUIN/IMAZETHAPYR DG is applied in liquid fertilizer as a carrier, a pre-slurry must first be made. Each IMAZAQUIN/IMAZETHAPYR DG water soluble packet and its contents must be completely dispersed in at least one gallon of water. Always test the compatibility of the IMAZAQUIN/IMAZETHAPYR DG slurry with the liquid fertilizer before mixing in the spray tank.

Follow all IMAZAQUIN/IMAZETHAPYR DG 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.

All individual state regulations relating to fluid fertilizer mixing, registration, labeling and application are the responsibility of the individual and/or company selling the IMAZAQUIN/IMAZETHAPYR DG/liquid fertilizer mixture.

SPRAYING INSTRUCTIONS

PROPOSED IMAZAQUIN/IMAZETHAPYR DG LABEL

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NOTE: DO NOT make applications when spray may be carried by wind to sensitive crops.
Avoid overlaps when spraying.

GROUND APPLICATIONS:

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. Use sprayers equipped with nozzles that provide accurate and uniform application. To minimize drift, use a maximum spray pressure of 40 psi.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying IMAZAQUIN/IMAZETHAPYR DG in no-till or as a postemergence treatment. Use higher gallonage for fields with dense vegetation or heavy crop residues.

DO NOT apply with ground equipment when wind velocity is greater than 10 mph.

For band treatment, apply the broadcast equivalent rate and volume per acre. To determine these:

$$\begin{array}{l} \text{Band width} \\ \text{in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{Rate} \\ \text{per acre} \end{array} = \begin{array}{l} \text{Band RATE} \\ \text{per acre} \end{array}$$

$$\begin{array}{l} \text{Band width} \\ \text{in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{VOLUME} \\ \text{per acre} \end{array} = \begin{array}{l} \text{Band VOLUME} \\ \text{per acre} \end{array}$$

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AERIAL APPLICATIONS:

Uniformly apply with properly calibrated aerial equipment in 5 or more gallons of water per acre.

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

- Use nozzles which produce a coarse spray.
- Nozzle height above ground must be a maximum of 10 feet.
- Nozzles must be pointed toward 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.

Applicator is responsible for any loss or damage which results from spraying IMAZAQUIN/IMAZETHAPYR DG 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.

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ROTATIONAL CROP RESTRICTIONS

The following rotational crops may be planted after applying IMAZAQUIN/IMAZETHAPYR DG at recommended rates in soybeans:

CROP	USE REGION 1	USE REGION 2 (except Michigan ⁵)	USE REGION 3
Soybeans	No restrictions	No restrictions	No restrictions
Wheat	4 months	4 months ⁶	11 months
Field Corn	9.5 months ³	9.5 months ^{4,6}	18 months ⁷
See FOOTNOTE 1	11 months	11 months ⁶	11 months
See FOOTNOTE 2	18 months	18 months	18 months
Other Crops	26 months	26 months	26 months
Sugar and Table Beets	40 months	40 months	40 months

¹ Barley, Edible Beans, Peanuts, Tobacco

² Alfalfa, Cotton, Lettuce, Oats, Popcorn, Safflower, Sorghum, Sweet corn.

³ For USE REGION 1 as defined in the USE AREA section of this label; field corn may be planted in the spring of the year following IMAZAQUIN/IMAZETHAPYR DG application unless extreme drought conditions develop (less than 15 inches of rainfall or irrigation is received within 6 months following the date of last application).

⁴ For USE REGION 2 (except Michigan⁵) as defined in the USE AREA section of this label; field corn may be planted in the spring of the year following IMAZAQUIN/IMAZETHAPYR DG application unless extreme drought conditions develop (less than 15 inches of rainfall or irrigation is received from two weeks prior to the date of last application through November 15 of the same year).

If the minimum rainfall requirement is not met, only field corn hybrids which possess tolerance or resistance to IMAZAQUIN/IMAZETHAPYR DG and other imidazolinone herbicides may be planted the spring of the year following a IMAZAQUIN/IMAZETHAPYR DG application (SEE NOTE).

⁵ Growers in the Michigan counties of Berrien, Cass, St. Joseph, Branch, Hillsdale, Lenawee, Monroe, Van Buren, Kalamazoo, Calhoun, Jackson, Washtenaw, and Wayne may use the rotational crop restrictions for Use Region 2.

For other Michigan counties, growers may only plant field corn hybrids which possess tolerance or resistance to IMAZAQUIN/IMAZETHAPYR DG and other imidazolinone herbicides the spring of the year following an application including IMAZAQUIN/IMAZETHAPYR DG (SEE NOTE).

⁶ ROTATIONAL CROP RESTRICTIONS for a sequential application of SCEPTER O.T. following a soil application of IMAZAQUIN/IMAZETHAPYR DG (USE REGION 2 only):

For USE REGION 2 as defined in the USE AREA section of this label; soybeans may be planted anytime. Barley, edible beans, peanuts, tobacco, and wheat may be planted 15 months after the last herbicide application. Cotton may be planted 18 months after the last herbicide application.

Only field corn hybrids which possess tolerance or resistance to IMAZAQUIN/IMAZETHAPYR DG and other imidazolinone herbicides may be planted the spring of the year following a sequential application (SEE NOTE). Other field corn varieties may be planted 15 months after the last herbicide application.

⁷ Only field corn hybrids which possess tolerance or resistance to IMAZAQUIN/IMAZETHAPYR DG and other imidazolinone herbicides may be planted the spring of the year following a IMAZAQUIN/IMAZETHAPYR DG application (SEE NOTE).

NOTE: Contact your chemical dealer, seed supplier, or American Cyanamid to obtain information regarding the availability of imidazolinone tolerant field corn hybrids which are adapted to your area.

Use of IMAZAQUIN/IMAZETHAPYR DG 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, crop injury, is always possible.

Except where otherwise stated on a Supplemental Label or in this label, DO NOT apply products containing chlorimuron ethyl (e.g. Classic¹⁸, Canopy¹⁸, Gemini¹⁸, Lorox Plus¹⁸, Preview¹⁸, etc.), imazaquin (e.g. SCEPTER, SCEPTER 70DG, SQUADRON[®], TRI-SCEPT[®], SCEPTER O.T.), imazethapyr (e.g. PURSUIT, PURSUIT DG, PURSUIT[®] PLUS, PASSPORT[®]) or flumetsulam (e.g. Broadstrike¹⁹) the same year as IMAZAQUIN/IMAZETHAPYR DG because injury to follow crops may occur.

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¹Trademark of AGSCO, Inc.

^{2,9,17}Registered Trademarks of Zeneca, Inc.

^{3,5}Registered Trademarks of Monsanto Agricultural Products Company.

⁴Registered Trademark of Sandoz Agro, Inc.

⁶Registered Trademark of Ciba-Geigy Corporation.

^{7,15}Registered Trademarks of Valent USA Corporation.

^{8,14,16}Registered Trademarks of BASF Corporation.

^{10,13,18}Registered Trademarks of E. I. duPont de Nemours and Company.

¹¹Registered Trademark of Hoechst-Roussel Agri-Vet. Co.

¹²Registered Trademark of Miles Company.

¹⁹Registered Trademark of DowElanco Company.