

42750-147

10/4/2011

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

OCT 4 2011

Morris Gaskins  
Albaugh, Inc.  
P.O. Box 2127  
Valdosta, GA 31604-2127

Subject: Label Amendment  
Imazethapyr 1.8% + Glyphosate 22%  
EPA Reg. No. 42750-147  
Date Submitted: July 8, 2011

Dear Mr. Gaskins:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

Amended labeling will supersede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

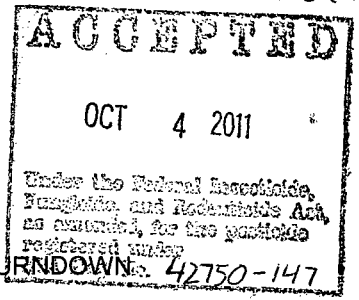
Submit one (1) copy of final printed labeling before you release the products for shipment. If you have any questions regarding this letter, please contact Maggie Rudick at (703) 347-0257 or [rudick.maggie@epa.gov](mailto:rudick.maggie@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis".

Kable Bo Davis  
Product Manager 25  
Herbicide Branch  
Registration Division (7505P)

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### IMAZETHAPYR 1.8% + GLYPHOSATE 22%

FOR USE ON ROUNDUP READY® SOYBEANS AND FALL OR SPRING WEED BURNDOWN APPLICATION ON CLEARFIELD® CORN

Group	2 & 9	Herbicide
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**ACTIVE INGREDIENTS:**

Imazethapyr (±)-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid	1.8%
Glyphosate: N-(phosphonomethyl) glycine, in the form of its isopropylamine salt	22.0%
<b>INERT INGREDIENTS:</b>	<b>76.2%</b>
<b>TOTAL:</b>	<b>100.00%</b>

IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide contains 2.17 pounds of active ingredient per gallon (0.17 pounds acid equivalent of imazethapyr and 2 pounds of glyphosate as the isopropylamine salt).

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.)

FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF SWALLOWED:	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to by a poison control center or doctor.</li> </ul>
<p>Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of an emergency involving this product, call CHEMTREC toll free at 1-800-424-9300.</p>	

EPA Reg. No. 42750-147

EPA Est. No. 42750-MO-001

NET CONTENTS: \_\_\_\_\_ Gallons

Manufactured By:  
ALBAUGH, INC.  
ANKENY, IA 50021

30417

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### WARNING

Causes substantial but temporary eye injury. DO NOT get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin.

#### 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 A on an ERA chemical-resistance category selection chart.

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants.
2. Chemical-resistant gloves, such as butyl rubber  $\geq 14$  mils, or natural rubber  $\geq 14$  mils, or neoprene rubber  $\geq 14$  mils, or nitrile rubber  $\geq 14$  mils.
3. Shoes plus socks.
4. 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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

Users Should:

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

#### 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.

#### Groundwater Advisory and Proper Handling Instructions

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

### 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 herbicide application.

Not for sale or use on Long Island, New York.

### 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 48 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 plant, soil, or water, is:

1. Coveralls.
2. Protective eyewear.
3. Chemical-resistant gloves, such as butyl rubber  $\geq 14$  mils, or natural rubber  $\geq 14$  mils, or neoprene rubber  $\geq 14$  mils, or nitrile rubber  $\geq 14$  mils.
4. Shoes plus socks.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide is stable under conditions of freezing and thawing. Shake well before using. Keep containers closed to avoid spills and contamination.

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

CONTAINER HANDLING: (See the Net Contents section on the container to determine if it non-refillable or refillable.) APPROPRIATE BOX MUST BE CHECKED.

Non-refillable containers (1 and 2.5 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Non-refillable containers (>5 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable containers: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

When this container is empty, replace the cap and seal all openings that have been made during usage and return the container to the point of purchase, or to an alternate location designated by the manufacturer at the time of purchase of this product. If not returned, clean container the empty container and offer for recycling, if available.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler.

To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

If the container cannot be refilled, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### DRIFT CONTROL ADDITIVES

Drift control additives may be included to either ground or aerial applications. When a drift control agent is used, read and carefully observe the precautionary statements and all other information appearing on the additive label.

To avoid injury to sensitive crops, spray equipment used for IMAZETHAPYR 1.8% + GLYPHOSATE 22% applications must be drained and thoroughly cleaned with water before being used to apply other products.

When IMAZETHAPYR 1.8% + GLYPHOSATE 22% 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 may be exceeded. IMAZETHAPYR 1.8% + GLYPHOSATE 22% cannot be mixed with any product containing a label prohibiting such mixtures.

### SPRAYING INSTRUCTIONS

DO NOT apply when winds are gusty, under low-level inversion conditions or under other conditions that favor drift. Maintain appropriate buffer zones between treated fields and adjacent desirable vegetation. Exposed leaves or other green tissue may be damaged or killed by drift from IMAZETHAPYR 1.8% + GLYPHOSATE 22%.

### GROUND APPLICATIONS:

Uniformly apply with property calibrated ground equipment in 10 or more gallons of water per acre. A spray pressure of 20 to 40 psi is required.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying IMAZETHAPYR 1.8% + GLYPHOSATE 22% to minimum or no-till crops. 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 instructions). Use only flat-fan nozzle tips for postemergence applications.

Avoid overlaps when spraying.

### IMAZETHAPYR 1.8% + GLYPHOSATE 22% APPLICATIONS WITH A LOW VOLUME SPRAYER:

IMAZETHAPYR 1.8% + GLYPHOSATE 22% may be applied to soybeans with a low volume (Spra-Coupe type) sprayer. When applying IMAZETHAPYR 1.8% + GLYPHOSATE 22% with a low volume sprayer, spray the weeds before they reach the maximum size listed in this label. Adequate control of weeds is dependent upon good spray coverage of the weeds. The sprayer must be calibrated to deliver the recommended spray volume and pressure to ensure adequate spray coverage of the weeds.

When applying IMAZETHAPYR 1.8% + GLYPHOSATE 22% with a low volume sprayer, apply a minimum of 10 gallons per acre of spray solution with a nozzle pressure between 40-60 psi for optimum coverage. Lower nozzle pressure will minimize the potential for drift to desirable vegetation.

### AERIAL APPLICATION

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 0.1 25% v/v of spray solution AND ammonium sulfate at the rate of 2.5 lb/acre. (See instructions under APPLICATION INFORMATION - POSTEMERGENCE)

**AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.** The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in the aerial drift reduction advisory presented below.

**INFORMATION ON DROPLET SIZE**

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

**CONTROLLING DROPLET SIZE**

- Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure – Do not exceed the nozzle manufacturer’s recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles – Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM LENGTH**

For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

**APPLICATION HEIGHT**

Do not make applications at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

## SWATH ADJUSTMENT

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.)

## WIND

Application is prohibited when wind speeds are less than 3 mph, and wind speeds are greater than 10 mph. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## TEMPERATURE AND HUMIDITY

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## TEMPERATURE INVERSIONS

Do not make applications occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

Applicator is responsible for any loss or damage which results from spraying IMAZETHAPYR 1.8% + GLYPHOSATE 22% in a manner other than specified or required in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.



USE INSTRUCTIONS FOR NON-ROUNDUP READY AND ROUNDUP READY SOYBEANS

BURNDOWN WEED CONTROL  
(No-till soybeans and stale seedbed)

Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% for burndown of weeds in no-till soybeans. It may be applied prior to planting, or preemergence of any soybean variety (including Roundup Ready or non-Roundup Ready soybeans). Add 2,4-D to the spray tank for enhanced control of perennial weeds including marestail and hemp dogbane.

ROUNDUP READY SOYBEANS  
(glyphosate resistant)

IMAZETHAPYR 1.8% + GLYPHOSATE 22% may also be applied for postemergence weed control in Roundup Ready soybeans. Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% for general weed burndown and season-long control of broadleaf and grassy weeds.

For season-long control of grasses, apply Prowl® 3.3 EC herbicide prior to planting soybeans. Prowl® 3.3 EC will also enhance control of waterhemp. A postemergence application of IMAZETHAPYR 1.8% + GLYPHOSATE 22% will control any escape weeds and provide season-long control of most broadleaf and grass weeds.

When mixing IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide with 2,4-D or Prowl® 3.3 EC, always use in accordance with the more restrictive label limitations and precautions. No label dosage rates can be exceeded. This product can not be mixed with any product containing a label prohibition against such mixing.

When organophosphate such as (chlorpyrifos) or carbamate insecticides are tank-mixed with IMAZETHAPYR 1.8% + GLYPHOSATE 22% temporary injury may result to the treated crops.

NOTE: DO NOT apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% postemergence to non-glyphosate-resistant soybeans.

FALL APPLICATIONS IN A PLANNED SEQUENTIAL PROGRAM  
ON ROUNDUP READY SOYBEANS

Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide after fall harvest and prior to ground freeze-up in the winter. Fall applications of IMAZETHAPYR 1.8% + GLYPHOSATE 22% will control existing weeds and provide residual control of winter annual weeds and early spring germinating weeds in soybeans. Soybeans must be planted in the spring following the fall application of IMAZETHAPYR 1.8% + GLYPHOSATE 22%. If weeds emerge in-season, other registered soybean products may be applied postemergence for weed control.

NOTE: For fall applications of IMAZETHAPYR 1.8% + GLYPHOSATE 22% adjust the rotational crop intervals by basing the interval on the date of soybean planting rather than the date of herbicide application.

FALL OR SPRING BURNDOWN APPLICATION IN A PLANNED SEQUENTIAL PROGRAM WITH  
LIGHTNING® HERBICIDE APPLIED TO CLEARFIELD CORN  
(only in states of Kentucky, Tennessee, and south of Interstate 70 in Indiana).

IMAZETHAPYR 1.8% + GLYPHOSATE 22% may be applied as a fall or spring burndown application prior to planting CLEARFIELD® corn and the use of Lightning® Herbicide in-crop to CLEARFIELD® corn. DO NOT apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% to emerged CLEARFIELD® corn, or crop injury will occur.

NOTE: DO NOT apply COUNTER® CR insecticide or COUNTER® 15G insecticide to acres treated with IMAZETHAPYR 1.8% + GLYPHOSATE 22% preplant CLEARFIELD corn or crop injury may occur.

DO NOT plant wheat in the same year as application of IMAZETHAPYR 1.8% + GLYPHOSATE 22% followed by Lightning®, unless at least 10 inches of rainfall or overhead irrigation has occurred between application of IMAZETHAPYR 1.8% + GLYPHOSATE 22% and planting of wheat.

ATTENTION

AVOID CONTACT OF IMAZETHAPYR 1.8% + GLYPHOSATE 22% WITH FOLIAGE OF DESIRABLE PLANTS, BECAUSE SEVERE INJURY OR PLANT DEATH MAY RESULT.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

DO NOT allow the herbicide solution to drift onto desirable vegetation. Very small amounts of drift may cause injury or death to desirable crops or plants. The likelihood of injury occurring from the use of this product increases when winds are gusty. The risk of injury from this product increases when wind direction is constantly changing or during inversion conditions or other weather conditions that favor drift. Avoid applications using high spray pressure and high speed. These contribute to conditions that favor small spray droplets and drift.

APPLICATION RATES

BURNDOWN WEED CONTROL  
(No-till soybeans and stale seedbed).

Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% at the rate of 3 pints per acre. (One gallon will treat 2.7 acres of soybeans at this rate.)

ROUNDUP READY SOYBEANS  
(glyphosate resistant - in crop postemergence weed control).

IMAZETHAPYR 1.8% + GLYPHOSATE 22% provides burndown and residual control of many broadleaf and grassy weeds in soybeans. It can be applied to no-till soybeans as a burndown prior to planting. It may also be applied postemergence to Roundup Ready® soybeans for season-long weed control. IMAZETHAPYR 1.8% + GLYPHOSATE 22% is effective for control of difficult weeds common to no-till production, including marestail.

Occasionally, internode shortening and/or temporary yellowing of crop plants may occur following an IMAZETHAPYR 1.8% + GLYPHOSATE 22% application. These effects occur infrequently and are usually temporary.

To minimize weed competition to the soybeans, apply to weeds 1 - 8 inches in size. Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% at the rate of 3 pints per acre. (One gallon will treat 2.7 acres of soybeans at this rate.)

FALL APPLICATIONS IN A PLANNED SEQUENTIAL PROGRAM  
ON ROUNDUP READY SOYBEANS

Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% at a rate of 3 pints per acre. (One gallon will treat 2.7 acres at this rate.)

FALL OR SPRING BURNDOWN APPLICATION IN A PLANNED SEQUENTIAL PROGRAM  
WITH LIGHTNING® HERBICIDE APPLIED TO CLEARFIELD® CORN  
(only in states of Kentucky, Tennessee, and south of Interstate 70 in Indiana).

Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% at a rate of 3 pints per acre.  
(One gallon will treat 2.7 acres at this rate.)

Only one application of IMAZETHAPYR 1.8% + GLYPHOSATE 22% may be made during the season,  
not to exceed 3.0 pints per acre.

ROUNDUP READY SOYBEANS  
(only in North Dakota and north of Highway # 210 in Minnesota)

Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% at 2.25 pts/A. DO NOT exceed 2.25 pts/A. One gallon  
of IMAZETHAPYR 1.8% + GLYPHOSATE 22% will treat 2.0 acres at this rate.

Only one application of IMAZETHAPYR 1.8% + GLYPHOSATE 22% may be made during the season. DO  
NOT exceed 3.0 pts/A of IMAZETHAPYR 1.8% + GLYPHOSATE 22%.

MIXING INSTRUCTIONS

BURNDOWN OR POSTEMERGENCE APPLICATIONS OF IMAZETHAPYR 1.8% + GLYPHOSATE 22%  
REQUIRE THE ADDITION OF A SURFACTANT AND FERTILIZER.

- 1. SURFACTANTS: Use a non-ionic surfactant containing at least 80% active ingredient. Apply the  
surfactant at the rate of 1 pint per 100 gallons of spray mixture (0.125% v/v of the spray mixture).  
Use only surfactants approved for application to growing crops.

AND

- 2. FERTILIZER: Include a fertilizer in the spray solution. Add spray grade ammonium sulfate at the rate  
of 8.5-17 lbs. per 100 gallons of spray solution. Use the higher rate when weeds are under moisture  
or temperature stress.

When mixing IMAZETHAPYR 1.8% + GLYPHOSATE 22%, while agitating, add components in the  
following order:

- 1) Fill spray tank 1/2 full with clean water.
- 2) Add fertilizer.
- 3) Add IMAZETHAPYR 1.8% + GLYPHOSATE 22% and thoroughly mix.
- 4) Add surfactant to the spray tank.
- 5) While agitating, fill the remainder of the tank with water.

APPLICATION INFORMATION

POSTEMERGENCE

IMAZETHAPYR 1.8% + GLYPHOSATE 22% is effective in controlling weeds in conservation tillage as  
well as in conventional production systems. Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% as a  
postemergence treatment. Application timing should be based on weed size and not crop growth stage.  
Apply IMAZETHAPYR 1.8% + GLYPHOSATE 22% to Roundup Ready® Soybeans and weeds that are  
actively growing.

A non-ionic surfactant and a nitrogen-based fertilizer must be added to the spray solution for optimum  
weed control activity. See the ADJUVANTS section under MIXING INSTRUCTIONS for specific  
instructions.

When IMAZETHAPYR 1.8% + GLYPHOSATE 22% is applied postemergence, absorption will occur through both the roots and foliage. Susceptible weeds stop growing and either die or are not competitive with the crop. IMAZETHAPYR 1.8% + GLYPHOSATE 22% not only controls many existing broadleaf and grass weeds when applied postemergence, it also provides control of susceptible weeds that may emerge after application.

For maximum weed control, cultivate 7 -10 days following a postemergence IMAZETHAPYR 1.8% + GLYPHOSATE 22% application. This timely cultivation will enhance residual weed control, especially under dry conditions.

IMAZETHAPYR 1.8% + GLYPHOSATE 22% must be applied a minimum of one hour before rainfall or overhead irrigation.

Unusually cool temperatures (50° F or less) reduce photosynthesis and transpiration and thus reduce uptake, translocation, and efficacy of IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide in weeds.

If air temperature has been below 50° F for 10 or more hours, delaying an IMAZETHAPYR 1.8% + GLYPHOSATE 22% application for 48 hours after the temperature increases above 50° F, will improve weed control and reduce crop response.

#### NO-TILL/MINIMUM TILLAGE AND DOUBLE CROP SOYBEANS

IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide controls existing weeds and provides residual control of most weeds when applied early postemergence to soybeans in no-till or minimum tillage and double crop soybean production systems. The application may be applied either before or after emergence of the crop. (Refer to the WEEDS CONTROLLED chart for weeds controlled and recommended weed size).

The addition of Prowl® 3.3 EC herbicide in a tank-mixture with IMAZETHAPYR 1.8% + GLYPHOSATE 22% for burndown weed control will provide season-long control of grasses and enhance control of waterhemp.

For improved burndown weed control, IMAZETHAPYR 1.8% + GLYPHOSATE 22% may be tank-mixed with 2,4-D. Refer to the 2,4-D label for application rates and intervals between application and planting.

#### SOYBEANS USE RESTRICTIONS AND PRECAUTIONS

- If soybeans are 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.
- There must be an interval of at least 85 days between an application of IMAZETHAPYR 1.8% + GLYPHOSATE 22% and soybean harvest.
- IMAZETHAPYR 1.8% + GLYPHOSATE 22% applications must be made before soybean bloom.
- Make only one application of IMAZETHAPYR 1.8% + GLYPHOSATE 22% per soybean growing season.
- DO NOT graze or feed treated soybean forage, hay or straw to livestock.

## BROADLEAF WEEDS CONTROLLED

Broadleaf Weeds Controlled	Maximum Size (inches)
Alligator weed	5
Amaranth, Palmer	12
Anoda, spurred	3
Artichoke Jerusalem	8
Buffalobur	5
Bristly starbur	3
Buckwheat, wild	4
Burcucumber	12
Carpetweed	18
Chickweed	18
Cocklebur, common	18
Copperleaf	
Hophornbeam	2
Virginia	2
Corn (volunteer- non Roundup Ready)	20
Eclipta	8
Fleabane	
Annual	8
Hairy	8
Rough	6
Jimsonweed	6
Hemp sesbania	2
Horseweed/marestail	12
Knotweed	8
Kochia	12
Lambsquarters, common	8
Marshelder	5
Morningglory, annual	
Ipomea spp.	4
Mustard spp.	18
Nightshade	
Black	12
Eastern black	12
Hairy	12
Pigweed	
Redroot	18
Smooth	18
Spiny	18
Ragweed	
Common	9
Giant	9
Smartweed	
Ladysthumb	6
Pennsylvania	6
Spurge,	
Prostrate	12
Spotted	12
Sicklepod	3
Sunflower	18
Teaweed/prickly sida	2
Velvetleaf	5

Broadleaf Weeds Controlled	Maximum Size (inches)
Waterhemp	12

GRASS WEEDS CONTROLLED

Grass Weeds controlled	Maximum Size (inches)
Barley (volunteer)	12
Barnyardgrass	6
Crabgrass	
Large	12
Smooth	12
Cupgrass, woolly	12
Foxtail	
Giant	18
Green	18
Yellow	18
Goosegrass	5
Johnsongrass	
Seedling	12
Rhizome	12
Oats (volunteer)	12
Panicum	
Fall	12
Texas	12
Browntop	12
Red rice	4
Rye	18
Shattercane	18
Sprangletop	12
Signalgrass, broadleaf	8
Sorghum, alnum	4
Wheat (volunteer)	18
Wild oats	12

SEDGES CONTROLLED

Nutsedge	
Purple	3 <sup>1</sup>
Yellow	3 <sup>1</sup>

<sup>1</sup> Reduced competition

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ROTATIONAL CROP INSTRUCTIONS

The following rotational crops may be planted after applying IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide at the specified rate:

Time after IMAZETHAPYR 1.8% + GLYPHOSATE 22% application	CROP
Anytime	CLEARFIELD corn seed hybrids (resistant/tolerant to Pursuit herbicide) Lima beans Peanuts Peas Southern peas Soybeans
Two months	Snap peas
Four Months	Alfalfa Clover CLEARFIELD Wheat Edible beans and peas (other than lima beans) Rye (Except in North Dakota and Minnesota north of highway 210) Wheat
Eight and one-half months	Field corn Field corn grown for seed
Nine and one-half months	Barley (except in North Dakota) Tobacco
Twelve months	CLEARFIELD canola varieties (tolerant to Pursuit herbicide)
Eighteen months	Cotton Lettuce Oats Popcorn Rye (North Dakota and Minnesota north of highway 210) Safflower Sorghum Sunflower Sweet corn
Twenty six months	Flax Potatoes
Forty months	All crops not listed elsewhere in these ROTATIONAL CROP INSTRUCTIONS <sup>1</sup>

<sup>1</sup> Following forty months after an IMAZETHAPYR 1.8% + GLYPHOSATE 22% application, and before planting any crop not listed elsewhere in the ROTATIONAL CROP INSTRUCTIONS 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.

Sugarbeet production can be reduced when grown in soil conditions with a pH less than 6.5. If the field is limed to adjust pH prior to planting rotational crops not listed in the ROTATIONAL CROP INSTRUCTIONS, apply the lime at least 12 months prior to planting the rotational crop.

Use of IMAZETHAPYR 1.8% + GLYPHOSATE 22% 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.

EXCEPTIONS TO ROTATIONAL CROP INSTRUCTIONS

BARLEY:

(North Dakota only). Barley may be planted 18 months following an IMAZETHAPYR 1.8% + GLYPHOSATE 22% application in North Dakota.

BARLEY:

(States of Indiana, Ohio, Kentucky, Pennsylvania, New Jersey, Delaware, Virginia and Maryland only).

Barley may be planted 4 months following an IMAZETHAPYR 1.8% + GLYPHOSATE 22% application in these states.

CORN INBRED LINES:

Corn inbred seed lines may be planted the year following an application of IMAZETHAPYR 1.8% + GLYPHOSATE 22%. Several seed companies have tested a wide range of inbreds for sensitivity to IMAZETHAPYR 1.8% + GLYPHOSATE 22% soil residues and have reported good crop safety. However, due to the proprietary nature of seed production, ALBAUGH, INC. 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 IMAZETHAPYR 1.8% + GLYPHOSATE 22% herbicide the previous year. Since growing conditions, environmental conditions and grower practices are beyond the control of ALBAUGH, INC., to the extent permitted by applicable law, all risks and consequences associated with planting seed corn inbreds into fields treated previously with IMAZETHAPYR 1.8% + GLYPHOSATE 22% shall be assumed by the user.

SWEET COM AND POPCORN VARIETIES:

(States of Iowa, Illinois, Indiana, Ohio, Wisconsin, Minnesota and Tennessee only).

Sweet corn and popcorn varieties may be planted the year following an application of IMAZETHAPYR 1.8% + GLYPHOSATE 22%. Some sweet corn and popcorn varieties may be injured when planted at less than 18 months following an application of IMAZETHAPYR 1.8% + GLYPHOSATE 22%. 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 IMAZETHAPYR 1.8% + GLYPHOSATE 22% the previous year. DO NOT plant fresh market sweet corn varieties prior to 18 months after IMAZETHAPYR 1.8% + GLYPHOSATE 22% use. Before planting popcorn, contact the popcorn company for information and recommendations regarding the tolerance of popcorn varieties planned for fields treated with IMAZETHAPYR 1.8% + GLYPHOSATE 22% the previous year. Since growing conditions, environmental conditions and grower practices are beyond the control of Albaugh, Inc. TO THE EXTENT ALLOWABLE BY APPLICABLE LAW, ALL RISKS AND CONSEQUENCES ASSOCIATED WITH PLANTING SWEET CORN OR POPCORN VARIETIES INTO FIELDS TREATED PREVIOUSLY WITH IMAZETHAPYR 1.8% + GLYPHOSATE 22% SHALL BE ASSUMED BY THE USER.

Stunting and maturity delay or other adverse effects may result when sweet corn or popcorn are planted following IMAZETHAPYR 1.8% + GLYPHOSATE 22% use.

CERTAIN VEGETABLE CROPS:

(States of New Jersey, Virginia, North Carolina, South Carolina, Georgia, Alabama, Florida, Delaware, Maryland, Pennsylvania, Kentucky and Indiana only).



The following crops may be planted 18 months following the last application of IMAZETHAPYR 1.8% + GLYPHOSATE 22%: Bahiagrass, cabbage, cantaloupe, cucumber, Irish potato, onion, sweet potato transplants, sweet pepper transplants, tomato transplants, and watermelon.

**WHEAT:**

Wheat may be planted 3 months following a IMAZETHAPYR 1.8% + GLYPHOSATE 22% application in areas east of interstate highway I-35.

**NON-CLEARFIELD® WHEAT**

Rotational Interval based on pH, Moisture and Tillage (North Dakota)		Moldboard Plowing	
		NO	YES
pH and Rainfall Requirements	>10 inches R+I AND pH >6.2	4 months	4 months
	<10 inches R+I OR pH <6.2	15 months	4 months

R+I = Rainfall and overhead irrigation from the time of IMAZETHAPYR 1.8% + GLYPHOSATE 22% application up until time of wheat planting. Does not include furrow or flood irrigation.

If the rainfall or pH requirements are not fully met, and non-CLEARFIELD wheat is planted prior to the specified rotation interval, injury may be reduced by tillage, such as deep disking (greater than 6 inches deep) after crop harvest but prior to November 1.

The possibility of injury to non-CLEARFIELD wheat planted the next season increases if less than normal precipitation occurs within the first two months after IMAZETHAPYR 1.8% + GLYPHOSATE 22% application.

**CONDITIONS OF SALE AND WARRANTY**

The Directions For Use of this product reflects the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of ALBAUGH, INC. or the Seller. To the extent allowable by applicable law, all such risks shall be assumed by the Buyer.

ALBAUGH, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions For Use, subject to the inherent risks, referred to above.

ALBAUGH, INC. MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. TO THE EXTENT PERMITTED BY LAW, ALBAUGH, INC. AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALBAUGH, INC. and the Seller offer this product, and he Buyer and User accept it, subject to the foregoing "conditions of Sale and Warranty which may be varied only by agreement in writing signed by a duly authorized representative of ALBAUGH, INC..

**Uses With Other Products (Tank-mixes)**

If this product is used in combination with any other product except as specifically recommended in writing by ALBAUGH, INC., then ALBAUGH, INC. 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 ALBAUGH, INC., to the extent allowable by applicable law, the liability of ALBAUGH, INC. shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the ALBAUGH, INC. product in such combination use, and to the extent allowable by applicable law, in any event shall be limited to return of the amount of the purchase price of the ALBAUGH, INC. product.

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