42750-147

11/9/2007

104/0



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

OFFICE OF PREVENTION, PESTICIDES AND FOXIC SUBSTANCES

9 2007

NOV

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

RE: Notification of Alternate Brand Name

EPA Reg. No.: 42750-147

Date of Submission: October 5, 2007

Dear Mr. Gaskins:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated October 5, 2007, for the product Imazethapyr 1.8% + Glyphosate 22%. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please call me directly at 703-305-6249 or Joyce Edwards of my staff at 703-308-5479.

Sincerely,

Linda Arrington

Notifications & Minor Formulations Team Leader

Registration Division (7505P)

Office of Pesticide Programs

Please read instructions on r	everse before co,let	ting form.		Form Ap	D(01	. OMB No. 20	70-006	20F W
\$EPA	U Environmental	nited States	•			Registrat Amendm Other	ion	OPP Identifier Number
		Applicatio	n for Pestic	ide - Sec	tion	ļ		
1. Company/Product Number 42750-147	,			Product Mar npkins	nager		3. Pr	oposed Classification
4. Company/Product (Name) Imazethapyr 1.8% + Gl	yphosate 22%		PM# 25]
5. Name and Address of App Albaugh Inc. P.O. Box 2127 Valdosta, GA 31604-		de)	(b)(i), to: EPA	my product	is simi		al in co	FIFRA Section 3(c)(3) mposition and labeling
			Section -				====	
Amendment - Explain Resubmission in resp Notification - Explain Explanation: Use addition Notification of alternate brand This notification is consistent labeling or the confidential state EPA. I further understand the FIFRA and I may be subject to	below. al page(s) if necessary iname: THUNDER MA with the provisions of P atement of formula of the	y. (For section STER R Notice 98-10 is product. I un of consistent wi	and EPA regulation derstand that it is the terms of PR	Final printe Agency let "Me Too" Other - Exp ons at 40 CFR a violation of 7 Notice 98-10	ter date Applica blain be 152.46 18 U.S.6 and 40	olow.	r change	make any false statement to
		·	Section -	111				
1. Material This Product Will	Be Packaged In:							
Child-Resistant Packaging Yes Volume No Certification must be submitted	Unit Packaging Yes No If "Yes" Unit Packaging wgt.	No. per container	Water Soluble Yes ✓ No If "Yes" Package wgt	Packaging No. per	or	2. Type of C	ontainer Metal Plastic Glass Paper Other (S	
	ontainer	4. Size(s) Ret	1 GL			Attached		•
6. Manner in Which Label is	Affixed to Product	J Lithog Paper Stenci	glued	Othe	or			···
			Section -	V		· · · · · ·		0 0
1. Contact Point (Complete	items directly below fo	or identificatio	n of individual to I	e contacted,	, if nece	essary, to prod	ess this	application.)
Name Morris Gaskins			Title Registrations M	anager		7	elephon 229-246	e No.ျ်ဂိုင္ပိုပ္ရိွ Area Code) 3288
I certify that the stater I acknowledge that an both under applicable I	y knowlinglly false or i	Certifica this form and misleading sta	all attachments ti	nereto are tru Inishable by 1	e, accu fine or i	rate and comp	ogeoc olete. 6 or occc	6. Date Application Received ိ (Stanped)
2. Signature	no /)	18	3. Title Registrations Mar	nager		L	0000	000 C
4. Typed Name Morris Gaskins		-	5. Date Oc	tober 5, 2	2007			

CORPORATE OFFICE

1525 NE 36th Street Ankeny, IA 50021 515.964.9444 - Office 800.247.8013 - Toll Free 515.964.7813 - Facsimile

CALBAUGH, ICC.

P.O. Box 2127 304 Janet Street, Suite H Valdosta, GA 31604 229.244.3288 - Office 229.244.5841 - Facsimile

FEDERAL EXPRESS

October 5, 2007

Mr. Jim Tompkins (PM 25)
Document Processing Desk (DIST)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
2777 South Crystal Dr.
Arlington, VA 22202

RE:

Imazethapyr 1.8% + Glyphosate 22%

EPA File Symbol 42750-147

Dear Mr. Tompkins,

The enclosed submission is a notification for the above referenced registration under PR Notice 98-10 of the alternate brand name:

Thunder Master

(42750-147)

Please call if you have any questions.

Regards,

Morris Gaskins

Registrations Manager

Albaugh, Inc.

229-244-3288

THUNDER MASTER

FOR USE ON ROUNDUP READY® SOYBEANS

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%
INERT INGREDIENTS:	<u>76.2%</u>
TOTAL:	100.00%

THUNDER MASTER 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:	 Hold eye open and rinse slowly and gently with water for 1 5-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice. 			
IF ON SKIN OR CLOTHING:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. 			
IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. 			

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.

EPA Reg. No. 42750-xxx

EPA Est. No. 42750-MO-001

NET CONTENTS:

Manufactured By: ALBAUGH, INC. ANKENY, IA 50021

50f/b

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 ≥14 mils, or natural rubber ≥14 mils, or neoprene rubber ≥14 mils, or nitrile rubber ≥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, 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 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

Cofle

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 ≥14 mils, or natural rubber ≥14 mils, or neoprene rubber >14 mils, or nitrile rubber >14 mils.
- 4. Shoes plus socks.

STORAGE AND DISPOSAL

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

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

GENERAL INFORMATION

THUNDER MASTER 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. THUNDER MASTER 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 THUNDER MASTER application. These effects occur infrequently and are usually temporary.

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

Apply THUNDER MASTER 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)

THUNDER MASTER may also be applied for postemergence weed control in Roundup Ready soybeans. Apply THUNDER MASTER 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 THUNDER MASTER will control any escape weeds and provide season-long control of most broadleaf and grass weeds.

When mixing THUNDER MASTER 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 should 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 THUNDER MASTER temporary injury may result to the treated crops.

NOTE: DO NOT apply THUNDER MASTER postemergence to non-glyphosate-resistant soybeans.

FALL APPLICATIONS IN A PLANNED SEQUENTIAL PROGRAM ON ROUNDUP READY SOYBEANS

Apply THUNDER MASTER herbicide after fall harvest and prior to ground freeze-up in the winter. Fall applications of THUNDER MASTER 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 THUNDER MASTER. If weeds emerge in-season, other registered soybean products may be applied postemergence for weed control.

NOTE: For fall applications of THUNDER MASTER adjust the rotational crop intervals by basing the interval on the date of soybean planting rather than the date of herbicide application.

80416

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).

THUNDER MASTER 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 THUNDER MASTER to emerged CLEARFIELD® corn, or crop injury will occur.

NOTE: DO NOT apply COUNTER® CR insecticide or COUNTER® 15G insecticide to acres treated with THUNDER MASTER preplant CLEARFIELD corn or crop injury may occur.

DO NOT plant wheat in the same year as application of THUNDER MASTER followed by Lightning®, unless at least 10 inches of rainfall or overhead irrigation has occurred between application of THUNDER MASTER and planting of wheat.

ATTENTION

AVOID CONTACT OF THUNDER MASTER 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.

RATES

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

Apply THUNDER MASTER 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).

To minimize weed competition to the soybeans, apply to weeds 1 - 8 inches in size. Apply THUNDER MASTER 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 THUNDER MASTER 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 THUNDER MASTER at a rate of 3 pints per acre. (One gallon will treat 2.7 acres at this rate.)

90916

Only one application of THUNDER MASTER may be made during the season, not to exceed 3.0 pints per acre.

MIXING INSTRUCTIONS

BURNDOWN OR POSTEMERGENCE APPLICATIONS OF THUNDER MASTER 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 THUNDER MASTER, while agitating, add components in the following order:

- 1) Fill spray tank 1/2 full with clean water.
- 2) Add fertilizer.
- 3) Add THUNDER MASTER and thoroughly mix.
- 4) Add surfactant to the spray tank.
- 5) While agitating, fill the remainder of the tank with water.

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 THUNDER MASTER applications must be drained and thoroughly cleaned with water before being used to apply other products.

When THUNDER MASTER herbicide is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper tinning, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages may be exceeded. THUNDER MASTER 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 THUNDER MASTER.

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 recommended.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying THUNDER MASTER 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 recommendation). Use only flat-fan nozzle tips for postemergence applications.

100016

Avoid overlaps when spraying.

THUNDER MASTER APPLICATIONS WITH A LOW VOLUME SPRAYER

THUNDER MASTER may be applied to soybeans with a low volume (Spra-Coupe type) sprayer. When applying THUNDER MASTER 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 THUNDER MASTER 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)

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 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. Coarse sprays (larger droplets) are less likely to drift.

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

APPLICATION INFORMATION

POSTEMERGENCE

THUNDER MASTER is effective in controlling weeds in conservation tillage as well as in conventional production systems. Apply THUNDER MASTER as a postemergence treatment. Application timing should be based on weed size and not crop growth stage. Apply THUNDER MASTER to crops 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 THUNDER MASTER 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. THUNDER MASTER 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 THUNDER MASTER application. This timely cultivation will enhance residual weed control, especially under dry conditions.

THUNDER MASTER should 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 THUNDER MASTER herbicide in weeds.

If air temperature has been below 50° F for 10 or more hours, delaying an THUNDER MASTER 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

THUNDER MASTER 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 THUNDER MASTER for burndown weed control will provide season-long control of grasses and enhance control of waterhemp:

For improved burndown weed control, THUNDER MASTER may be tank-mixed with 2,4-D. Refer to the 2,4-D label for application rates and intervals between application and planting.

BROADLEAF WEEDS CONTROLLED

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	
<u>Hophornbeam</u>	2
<u>Virginia</u>	2
Com (volunteer- non Roundup	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	
lpomea 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
Waterhemp	12

GRASS WEEDS CONTROLLED

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, almum	4
Wheat (volunteer)	18
Wild oats	12

SEDGES CONTROLLED

lutsedge		
Purple	31	
Yellow	 31	

1 Reduced competition

ROTATIONAL CROP INSTRUCTIONS

The following rotational crops may be planted after applying THUNDER MASTER herbicide at the specified rate:

- 1. Anytime:
- CLEARFIELD corn seed hybrids (resistant/tolerant to Pursuit herbicide)
- Lima beans
- Peanuts
- Southern peas
- Soybeans
- 2. Four months after THUNDER MASTER application:
- Alfalfa
- Clover
- CLEARFIELD Wheat
- Edible beans and peas (other than lima beans and Southern peas)
- Rye (Except in North Dakota and Minnesota north of highway 210)
- Wheat
- 3. Eight and one-half months after THUNDER MASTER application:
- Field corn
- Field corn grown for seed
- 4. Nine and one-half months after THUNDER MASTER application:
- Barley
- Tobacco

1409/4

- 5. Twelve months after THUNDER MASTER application:
- CLEARFIELD canola varieties (tolerant to Pursuit herbicide)
- 6. Eighteen months after THUNDER MASTER application:
- Cotton
- Lettuce
- Oats
- Popcorn
- Rye (North Dakota and Minnesota north of highway 210)
- Safflower
- Sorghum
- Sunflower
- Sweet corn
- 7. Twenty six months after THUNDER MASTER application:
- Flax
- Potatoes
- Forty months after THUNDER MASTER application:
- All crops not listed elsewhere in these ROTATIONAL CROP INSTRUCTIONS.
- ¹ Following forty months after an THUNDER MASTER 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 THUNDER MASTER 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

Wheat

Wheat may be planted 3 months following a THUNDER MASTER application in areas east of interstate highway I-35.

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 THUNDER MASTER. Some sweet corn and popcorn varieties may be injured when planted at less than 18 months

1504/6

following an application of THUNDER MASTER. 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 THUNDER MASTER the previous year. DO NOT plant fresh market sweet corn varieties prior to 18 months after THUNDER MASTER use. Before planting popcorn, contact the popcorn company for information and recommendations regarding the tolerance of popcorn varieties planned for fields treated with THUNDER MASTER 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 THUNDER MASTER SHALL BE ASSUMED BY THE USER.

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

Corn inbred lines:

Corn inbred seed lines may be planted the year following an application of THUNDER MASTER. Several seed companies have tested a wide range of inbreds for sensitivity to THUNDER MASTER 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 THUNDER MASTER 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 THUNDER MASTER shall be assumed by the user.

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 THUNDER MASTER: Bahiagrass, cabbage, cantaloupe, cucumber, Irish potato, onion, sweet potato transplants, sweet pepper transplants, tomato transplants, and watermelon.

Barley:

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

Barley may be planted 4 months following an THUNDER MASTER application in these states.

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 THUNDER MASTER and soybean harvest.

THUNDER MASTER applications must be made before soybean bloom.

Make only one application of THUNDER MASTER per soybean growing season.

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

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.

CLEARFIELD, Lightning and Prowl are registered trademarks of BASF Corp. Roundup Ready Soybeans is a registered trademark of Monsanto Company.