

264-847

08-17-2010

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

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Ms. Laura Phelps
Bayer CropScience LP
P.O. Box 12014, 2 T.W. Alexander Dr.
Research Triangle Park, NC 27709

AUG 17 2010

Subject: Label Amendment – address mefenpyr-diethyl maximum seasonal use rate
Product Name: Rimfire Herbicide
EPA Registration Number: 264-847
Decision Number: 434606

The label amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you make the following change to the product labeling:

- 1) Revise the section heading, “Container Disposal” with “Container Handling” in the Storage and Disposal section.
- 2) Replace “General” with “Product” in the section heading, “General Information” on page 3. The word “General” is an implied safety claim that makes all associated text unenforceable.
- 3) Add the word “per” after “mefenpyr-diethyl” and before “pound” in the safener language of the Tank Mixes section so that it reads as follows:
RIMFIRE Herbicide contains 0.121 pounds of mefenpyr-diethyl **per** pound of product.”
- 4) In the ‘Sensitive Areas’ section on page 8, replace “should” with “must” in the first sentence.

One copy of the master label stamped “Accepted with Comments” is enclosed for your records. Products shipped after 18 months from the date on this notice or the next printing of the label whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of this product constitutes acceptance of these conditions. This label supersedes all previous accepted labels. You must submit one copy of the final printed label before the product is released for shipment.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathryn V. Monatgue".

Kathryn V. Monatgue
Product Manager (23)
Herbicide Branch
Registration Division (7505P)

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RIMFIRE™ Herbicide

For post-emergence control of certain grasses and broadleaf weeds in winter and spring wheat (including durum).

ACTIVE INGREDIENTS:

Propoxycarbazone-sodium (CAS No. 181274-15-7) 8.14%
Mesosulfuron-Methyl (CAS No. 208465-21-8)..... 2.03%

INERT INGREDIENTS 89.83%

Contains petroleum distillates.

TOTAL: 100.0%

This product is a water dispersible granule containing 8.14% Propoxycarbazone-sodium and 2.03% Mesosulfuron-methyl, by weight

EPA Reg. No. 264-847

EPA Est.

STOP - Read the label before use 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 the label, find someone to explain it to you in detail.)

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577

For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

IF IN EYES:	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 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 INHALED:	<ul style="list-style-type: none"> Move person to fresh air If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> 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.
For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
NOTE TO PHYSICIAN: No specific antidote is available. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.	

ACCEPTED
with COMMENTS
In EPA Letter Dated:
AUG 17 2010
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

264-847

PRECAUTIONARY STATEMENTS

WARNING

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Causes substantial but temporary eye injury. Harmful if absorbed through skin, inhaled, or swallowed. Do not get in eyes, on skin, or clothing. Avoid contact with skin and breathing dust.

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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 EPA chemical resistance category selection chart.

Applicators and other handlers must wear: Long-sleeved shirt and long pants, socks, shoes, chemical resistant gloves such as barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, or neoprene rubber \geq 14 mils, and protective eyewear (safety glasses). Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENT

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into 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 any body of water and do not apply when/where conditions could favor runoff. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. Do not allow sprays to drift onto desirable plants. Drift or runoff may adversely affect non-target plants.

DIRECTIONS FOR USE

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

Do not use this product until you have read the entire label.

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil or water, is coveralls, socks, shoes, chemical resistant gloves such as barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, or neoprene rubber \geq 14 mils, and protective eye wear.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE

Store in a cool, dry place.

PESTICIDE DISPOSAL

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

CONTAINER DISPOSAL

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Offer for reconditioning, if appropriate. Triple 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 1/4 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. 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.

GENERAL INFORMATION

RIMFIRE Herbicide is intended for application as a foliar spray in winter and spring wheat (including durum) for control of annual grasses and broadleaf weeds.

ENVIRONMENTAL AND BIOLOGICAL ACTIVITY

RIMFIRE Herbicide is absorbed by foliage and roots of weeds and offers contact and residual weed control. RIMFIRE Herbicide provides the most consistent control when applied to actively growing weeds. RIMFIRE Herbicide is active against many important grass and broadleaf weeds (see list below for details). Environmental conditions which support vigorous growth of crop and weeds also result in highest herbicidal activity. Following application, symptoms of herbicidal activity may develop within several days. Speed of action depends on environmental conditions and increases with increasing temperature and moisture. Sensitive weeds quickly stop growing and no longer compete with the crop. Visible signs of activity include cessation of elongation, yellowing and/or reddening of weeds, and finally plant death.

Abnormal environmental conditions (excess soil moisture or drought, extreme cold weather) can influence crop tolerance and herbicidal activity and may cause temporary response of the crop or reduced levels of weed control. This may result in weed stunting, rather than weed death. However, weed competition will be greatly reduced, and should permit normal crop development. Crop response may occur when frost occurs shortly after application to actively growing wheat.

CROPS

RIMFIRE Herbicide may be used on winter and spring wheat, including durum.

VARIETIES

If RIMFIRE Herbicide is tank-mixed with any other product, refer to the label of the tank-mix partner for further instructions and potential restrictions (timing of application, varietal tolerance).

SURFACTANTS

RIMFIRE Herbicide is a water dispersible granule that does not include an adjuvant. A recommended adjuvant **must** be tankmixed with RIMFIRE Herbicide according to the guidelines as described in the **MIXING INSTRUCTIONS** section.

RIMFIRE Herbicide offers the flexibility to choose between three distinct adjuvant systems including 1) methylated seed oil or 2) "basic blend" type adjuvant, 3) non-ionic surfactant plus ammonium nitrogen fertilizer. A methylated seed oil, basic blend adjuvant or a non-ionic surfactant (NIS) plus ammonium nitrogen fertilizer must be tankmixed with RIMFIRE Herbicide.

Do not use additives that alter the spray solution below 6.0 pH. Best results are obtained at spray solution pH of 6.0 – 8.0.

Organosilicone-based surfactants or crop oil concentrate surfactants are not recommended for use with RIMFIRE Herbicide.

1) Methylated Seed Oil (MSO)

A methylated seed oil offers the most robust adjuvancy with Rimfire Herbicide. Select a high quality methylated seed oil containing at least 80% methylated seed oil and 10% emulsifier or greater. Use 1.3 – 1.5 pt MSO/acre in tankmixture with RIMFIRE Herbicide. The potential for crop response may be increased with the use of MSO compared to non-ionic surfactant plus ammonium nitrogen fertilizer.

When a methylated seed oil is used, ammonium nitrogen or ammonium sulfate fertilizers are not recommended.

2) Basic Blend Adjuvants

A basic blend adjuvant is a formulated combination of a non-ionic surfactant or methylated seed oil and a nitrogen source. Apply a basic blend adjuvant at 1 - 1.25 % v/v in tank mixture with RIMFIRE Herbicide. Select the appropriate amount of basic blend adjuvant per acre depending on local conditions but do not apply less basic blend adjuvant than 0.8 pt/acre.

When a basic blend adjuvant is used, ammonium nitrogen or ammonium sulfate fertilizers are not recommended.

3) Non-ionic Surfactant (NIS) + Ammonium Nitrogen Fertilizer (in water carrier solutions)

Use a non-ionic surfactant at a concentration of 0.25 - 0.5% v/v (1-2 qts per 100 gallons of spray solution) with ammonium nitrogen fertilizer. At least 80% of the surfactant product must be active non-ionic surfactant. Avoid products that do not accurately define their ingredients. Use a spray grade quality urea ammonium nitrogen fertilizer (28-0-0 or 30-0-0 or 32-0-0 at 1 – 2 qt/acre) or ammonium sulfate fertilizer (21-0-0-24 at 1.5 – 3 lbs/acre).

APPLICATION INFORMATION

RIMFIRE Herbicide should be applied to actively growing wheat in the spring.

RIMFIRE Herbicide provides consistent performance when applied with water as the spray carrier and the appropriate additive is added to the spray solution. Properly calibrated ground or aerial (fixed wing or helicopter) application equipment may be used to apply Rimfire Herbicide postemergence as a foliar spray. Weed infestations should be treated before they become competitive with the crop.

Thorough coverage of weeds is necessary to obtain good weed control. The use of nozzles and spray pressure that deliver MEDIUM spray droplets as indicated in the nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572 are highly recommended for optimum spray coverage and canopy penetration.

Select spray nozzles that provide best spray distribution and weed coverage at the appropriate spray pressure. Avoid uneven spray distribution, skips, overlaps, and spray drift.

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Do not apply RIMFIRE Herbicide through any type of irrigation system.

Apply 1.75 ounces /Acre of RIMFIRE Herbicide to wheat from emergence (fully expanded first true leaf) up to flag leaf emergence. Under dry conditions, use a dosage of up to 2.25 ounces /acre for best results.

Do not apply more than a total of 2.25 ounces/acre of RIMFIRE Herbicide per crop year.

GROUND APPLICATION

RIMFIRE Herbicide can be applied broadcast in 10 or more gallons of water per acre. For weed control in dense weed canopies, use 15 or more gallons of water per acre. Weed infestations should be treated before they become competitive with the crop.

The use of 80-degree or 110-degree flat-fan nozzles is highly recommended for optimum spray coverage and canopy penetration. To get uniform spray coverage, use nozzles and pressure that deliver MEDIUM spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE standard S-572. Use screens that are 50 mesh or larger.

AERIAL APPLICATION

Calibrate the spray equipment prior to use. RIMFIRE Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. Weed infestations should be treated before they become competitive with the crop.

To get uniform spray coverage, use nozzles and pressure that deliver MEDIUM spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE standard S-572. DO NOT use raindrop nozzles.

Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

See the *Spray Drift Management* section of this label for additional information on proper application of RIMFIRE Herbicide.

MIXING INSTRUCTIONS

RIMFIRE Herbicide must be applied with clean and properly calibrated equipment. Prior to adding RIMFIRE Herbicide to the spray tank, ensure that the spray tank, filters and nozzles have been thoroughly cleaned. In-line strainers and nozzle screens should be 50 mesh or coarser.

1. Fill the spray tank 1/4 to 1/2 full with clean water and begin agitation or bypass.
2. Add the appropriate rate of RIMFIRE Herbicide, as determined under "Recommended Rates", directly to the spray tank. Maintain sufficient agitation during both mixing and application.
3. Add a recommended broadleaf weed herbicide, if desired.
4. Add the surfactant.
5. Fill the spray tank with balance of water needed.
6. Continue agitation during RIMFIRE Herbicide application to ensure uniform spray coverage. If the mixture is not continuously agitated, settling may occur. Use spray solution within 24 hours after mixing.

RE-SUSPENDING WDG PRODUCTS IN SPRAY SOLUTION

Like other Water Dispersible Granules or suspension concentrates (SC's), RIMFIRE Herbicide will settle if left standing without agitation. If the spray solution is allowed to settle for one hour or more, re-agitate the spray solution for a minimum of 15 minutes before application.

COMPATIBILITY

If RIMFIRE Herbicide is to be tank mixed with other herbicides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 quart) of spray solution, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually occur within 5-15 minutes after mixing. Indications of incompatibility include separation in the mix and either clumping or clabbering of the mixture. Read and follow the label of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions.

WEEDS CONTROLLED

RIMFIRE Herbicide effectively controls the following weeds when applied at the rates and application timings shown and weeds are actively growing. Best control is achieved when grass weeds are treated at the 1-leaf to 2-tiller stage of growth and before broadleaf weeds are larger than 2 inches in height.

GRASS WEED RECOMMENDATIONS	
Cheat (True cheat)*	C
Barnyardgrass*	C
Downy brome	PC
Foxtail barley*	C
Green foxtail*	C
Japanese brome*	C
Little barley	PC
Persian darnel**	PC
Quackgrass	PC
Smooth brome	PC
Wild oat	C
Yellow Foxtail*	C

BROADLEAF WEED RECOMMENDATIONS	
Blue mustard	C
Black mustard	C
Catchweed bedstraw	PC
Canola (volunteer)	C
Common chickweed	PC
Cornflower / Bachelor's Button	PC
Dogfennel	PC
Field pennycress	PC
Henbit	PC
Ivyleaf speedwell	PC
London rocket	C
Mouseear chickweed	PC
Red clover	PC
Redroot pigweed ¹	PC
Shepherd's purse	PC
Swinecress	PC
Tansy mustard	C
Tumble mustard	C
Wild beet	C
Wild mustard	C
Wild radish	C
Wild turnip	C

C means Control. PC means Partial Control. Partially controlled weeds will be stunted in growth and/or be reduced in number as compared to non-treated areas but performance will not be commercially acceptable.

*These weeds will be controlled when Rimfire Herbicide is applied at the pre-tiller stage of weed growth.

** For control of Persian darnel use 2.25 oz/A of Rimfire Herbicide tankmixed with 0.5 oz/A Silverado Herbicide applied pre-tiller.

¹ Naturally occurring resistant biotypes of redroot pigweed are known to occur. Refer to the **WEED RESISTANCE** section for additional information regarding management tactics for resistant weeds.

USE RATES

Unless otherwise recommended by Bayer CropScience, do not use less than 1.75 oz per acre of RIMFIRE Herbicide.

Apply RIMFIRE Herbicide at 1.75 - 2.25 ounces/acre to wheat in spring as a single application to actively growing weeds. Under dry conditions, use a dosage of up to 2.25 ounces/acre for best results. Do not exceed a product application rate of 2.25 ounces/acre in a single application in the spring.

TANKMIXES

For broad-spectrum control of both annual grasses and broadleaf weeds, RIMFIRE Herbicide may be mixed with broadleaf herbicides and a non-ionic surfactant. RIMFIRE Herbicide contains 0.121 pounds of mefenpyr-diethyl pound of product. Applying the maximum labeled rate of RIMFIRE Herbicide delivers 0.017 lbs of mefenpyr-diethyl per acre. Do not apply more than 0.053 pounds of mefenpyr-diethyl per acre per year. With all tank-mix partners, read and follow use directions, rates, precautions, timing, recropping restrictions, grazing interval restrictions and recommendations on the broadleaf herbicide and surfactant labels.

Possible tank-mix partners include:

AFFINITY TANKMIX™ ¹	HARMONY EXTRA XP®
AFFINITY BROADSPEC™ ¹	HUSKIE™
ALLY®	MCP Ester ³
ALLY EXTRA®	OLYMPUS™ ⁴
BRONATE ADVANCED™ * ²	SILVERADO® ⁵
BUCTRIL® *	STARANE®, STARANE NXT ⁶
EXPRESS®	STINGER®
HARMONY®	WIDEMATCH™ ⁷

* Equivalent bromoxynil products may be substituted in a tankmix for these products.

¹ Up to 0.6 oz/A of Affinity Tankmix or up to 0.4 oz/A Affinity Broadspec is recommended for use in combination with RIMFIRE.

² Do not exceed 0.8 pt/A of Bronate Advanced in combination with RIMFIRE.

³ MCP Ester may be added as broadleaf tank mix partner with RIMFIRE at no more than 0.25 lb ai/A.

⁴ Refer to Olympus label concerning crop rotation recommendations. Do not apply more than a total of 0.84 ounces of propoxycarbazone-sodium (a.i.) per crop year.

⁵ Use 0.5 oz Silverado/A when tankmixing with RIMFIRE.

⁶ 0.3 pt/A of Starane or up to 14 oz of Starane NXT is recommended for use in combination with RIMFIRE.

⁷ 1.0 pt/A of WideMatch is recommended with for use in combination with RIMFIRE.

TANK MIXTURES FOR DISEASE CONTROL

RIMFIRE Herbicide may be applied in combination with Stratego®, Headline, Tilt® or Topsin® M 70WP fungicides for weed and disease control. When a fungicide and broadleaf herbicide are added in tankmixture to RIMFIRE Herbicide, grass control may be delayed or reduced. Refer to the specific fungicide label for use directions, application rates, restrictions and a list of diseases controlled.

TANK MIXTURES FOR INSECT CONTROL

RIMFIRE Herbicide may be applied with Baythroid® XL, Sevin® XLR Plus, Warrior® Insecticide with Zeon Technology or Z-Cype 0.8 EC Insecticide. Refer to the specific insecticide label for use directions, application rates, restrictions and a list of insects controlled.

TANK MIX PRECAUTIONS

Always follow the label instructions of the tankmix partner as well as RIMFIRE Herbicide. Check the compatibility of RIMFIRE Herbicide and the tankmix partner by mixing all components in the order specified in the **Mixing Instructions** section, including adjuvants and water, into a small separate container in order to evaluate compatibility prior to adding them to the tank.

TANK CLEANUP PROCEDURE

1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
2. Half fill the tank with clean water and add ammonia (i.e., 3% domestic ammonia solution) at a dilution rate of 1% (i.e., 1 gallon of domestic ammonia for every 100 gallons of rinsate). Complete filling of the tank with water. Agitate/recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.
3. Repeat step 2.
4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
5. Flush tank, boom, and hoses with clean water.
6. Inspect tank for visible residues. If present, repeat step 2.

CROP ROTATION RESTRICTIONS

RIMFIRE Herbicide breakdown in the soil is due mainly to microbial activity. It can be affected by soil temperature and moisture. Conditions that accelerate the breakdown of RIMFIRE Herbicide include adequate soil moisture and adequate soil temperatures to support microbial activity. Likewise, RIMFIRE Herbicide breakdown can be slowed under dry, cold conditions. When considering crop rotations, soil moisture and soil temperature conditions following application should be monitored.

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To ensure safety of rotational crops, the following rotational intervals must be followed:

North Dakota & Minnesota, Montana & South Dakota

Crop	Rotation Interval (Months)
Wheat	0
Millet	4
Alfalfa	10
Barley	10
Canola	10
Dry Beans	10
Flax	10
Lentils	10
Peas	10
Safflower	10
Soybeans	10
Sugar Beets	10
Sunflowers	10
Corn – Conventional	12

Washington, Oregon & Idaho

Crop	Rotation Interval (Months)
Wheat	0
Millet	4
Alfalfa	10
Barley	10
Canola	12
Dry Beans	10
Lentils	10
Peas	10
Corn – Conventional	18

- In areas where a crop is not specified, conduct a field bioassay as described in the **FIELD BIOASSAY** section of this label.
- In all areas, 24 inches of precipitation and a 12 month rotation interval are required for potatoes, buckwheat, and onions.

Rotational crops should not be planted on clay or eroded knolls or hillsides following a RIMFIRE Herbicide application without conducting a field bioassay.

FIELD BIOASSAY

A field bioassay must be conducted for crops not listed on this label and for crops listed on the label for which a shorter plant-back interval than listed is desired.

To conduct a field bioassay, plant strips of the crop you want to grow the season following RIMFIRE Herbicide application. Monitor the crop for response to RIMFIRE Herbicide to determine if the crop can be grown safely in previously treated RIMFIRE Herbicide areas.

Regardless of the bioassay results, do not plant any crop, except fall-sown or winter wheat, closer than 4 months after a RIMFIRE Herbicide application.

WEED RESISTANCE

RIMFIRE Herbicide is an acetolactate synthase (ALS) inhibiting herbicide. Some weed populations may contain plants naturally resistant to RIMFIRE Herbicide or other herbicides with same mode of action (ALS/AHAS enzyme inhibitors). Repeated use of herbicides with the same mode of action allows resistant weeds to spread. To manage the spread of resistant weed populations, use herbicides with different modes of action in tankmixture, rotation, or in conjunction with alternate cultural practices.

The use of RIMFIRE Herbicide should conform to resistance management strategies established for the use area. Consult your agricultural advisor for resistance management strategies and recommended pest management practices for your area.

SPRAY DRIFT MANAGEMENT

RIMFIRE Herbicide is not volatile. Damage to sensitive crops can occur as a result of spray drift. Spray drift can be managed by several application factors and by spraying under the appropriate climatic conditions. Consequently, avoidance of spray drift is the responsibility of the applicator and grower.

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 habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Avoiding spray drift at the application site is the responsibility of the applicator and grower. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply under circumstances where possible drift to unprotected persons or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outer most nozzles on the boom must not exceed 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.
3. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

Where states have more stringent regulations, they shall be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

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 below).

Uniform, thorough spray coverage is important to achieve consistent weed control. Select nozzles and pressure that deliver **MEDIUM** spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver **COARSE** spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

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 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT:

Applications should not be made at a height greater than 10 feet above the top of the largest 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.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

SWATH ADJUSTMENT:

When applications are made with a crosswind, the swath will be displaced downward. 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:

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. 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.

For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

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. Avoid spraying during conditions of low humidity and/or high temperatures.

TEMPERATURE INVERSIONS:

Do not make aerial or ground applications into areas of temperature inversions 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.

ENDANGERED SPECIES

To avoid adverse effects on endangered plant species, the following mitigation measures will be required where endangered species occur in Counties listed in the table on the following page.

For ground applications, the applicator must:

1. Apply when there is sustained wind away from native plant communities, OR
2. Leave 50 foot untreated buffer between treatment area and native plant communities.

For aerial applications, the applicator must:

1. Apply only when there is sustained wind away from native plant communities, OR
2. Leave 350 foot untreated buffer between treatment area and native plants.

State/County	State/County
Oregon	Washington
Baker	Chelan
Benton	Cowlitz
Clackamas	Lewis
Douglas	
Jackson	
Josephine	
Klamath	
Lane	
Linn	
Marion	
Polk	
Union	
Washington	
Yamhill	

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PRECAUTIONS FOR USE

- Use adjuvants as specified on this label.
- Do not apply RIMFIRE Herbicide to crops undersown with grass or legume species.
- RIMFIRE Herbicide is rainfast 4 hours after application to most weed species. Rainfall within 4 hours may result in reduced weed control.
- Applications should be made to actively growing weeds. Weed control may be reduced when weeds are under stress due to severe weather conditions, drought, very cold temperatures, etc. Weed control may be reduced if the herbicide application is made under dry, dusty conditions – especially in the wheel track areas.
- Do not make more than one application of RIMFIRE Herbicide in one growing season.
- Do not apply more than 2.25 ounces/acre of RIMFIRE Herbicide in one growing season.
- Do not apply more than 0.053 pounds of mefenpyr-diethyl per acre per year.
- Do not apply when wind causes drift to off-site vegetation as injury may occur. Small amounts of RIMFIRE Herbicide via drift or tank contamination can cause severe damage to crops other than wheat. Careful management of spray drift and tank cleanout is required.
- Wheat may be harvested for forage after 30 days or grain and straw 71 days after a RIMFIRE Herbicide application.
- Do not apply RIMFIRE Herbicide in tank mixture with malathion, mancozeb, phosphorodithioate (Di-Syston), or methyl parathion as unacceptable crop phytotoxicity may occur.

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IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

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Bayer CropScience

Bayer CropScience LP

P.O. Box 12014, 2 T.W. Alexander Drive

Research Triangle Park, North Carolina 27709

1-866-99BAYER (1-866-992-2937)

RIMFIRE™ Herbicide (PENDING) 05/11/10