

264-616

10/06/2008

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:
264-616

Date of Issuance:
OCT 6 2008

NOTICE OF PESTICIDE:
Registration
[X] Reregistration
(under FIFRA, as amended)

Term of Issuance:

Name of Pesticide Product:
Spin-Aid Herbicide

Name and Address of Registrant (include ZIP Code):
Bayer CropScience LP
P.O. Box 12014
2 T.W. Alexander Dr.
Research Triangle Park, NC 27709

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

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA section 4(g)(2)(C) provided you:

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data
2. Make the following changes to the product labeling.
1. This product has been classified as a Restricted Use Product due to dermal irritation. Add the following text to the top of the front panel of the label, enclosed in a box.

Restricted Use Pesticide
Due to dermal irritation.
For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

The above text must be set in type of the same minimum size as required for human hazard signal words and appear with sufficient prominence relative to the other text and graphic material on the front panel to make it unlikely to be overlooked under customary conditions of purchase and use.

Signature of Approving Official:

[Handwritten signature]

James A. Tompkins
Product Manager 25
Herbicide Branch
Registration Division (7505P)

Date:

OCT 6 2008

2. Add "Restricted Use Pesticide" immediately below the heading "Directions for Use".
3. Change the signal word from "WARNING – AVISO" to "DANGER – PELIGRO".
4. Change the text "INERT INGREDIENTS" to "OTHER INGREDIENTS".
5. Under First Aid, add the "If Inhaled" statement below. Arrange the route of exposure in the following order: "If Inhaled", "If Swallowed", "If in Eyes", "If on Skin or Clothing".

"IF INHALED:

- Move person to fresh air.
 - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth if possible.
 - Call a poison control center or doctor for further treatment advice."
6. Revise the Note to Physician to read "Probable mucosal damage may contraindicate the use of gastric lavage."
 7. Revise the Hazards to Humans and Domestic Animals sections to read the following:

"DANGER Corrosive. Causes skin burns. Harmful if absorbed through skin, swallowed, or inhaled. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals."

8. Revise the PPE section to read the following:

"Some materials that are chemical-resistant to this product are made of barrier laminate or butyl rubber. For more information, follow instructions in Supplement Three of PR Notice 93-7. If you want more options, follow the instructions for category B on an EPA chemical-resistance category selection chart.

Pilots must wear:

- Long-sleeved shirt and long pants, and
- Shoes and Socks,

Mixers, loaders, all other applicators and handlers must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant footwear plus socks,
- Chemical-resistant gloves,
- Chemical-resistant headgear for overhead exposure, and
- Chemical-resistant apron for mixing, loading or cleaning equipment.

See engineering controls for additional requirements."

9. Move the User Safety Recommendations box so it is directly below the Engineering Controls Statement section.

10. Revise the Container Disposal statement in accordance with PR Notice 2007-4.
11. Revise the rotational plantback statement to read "Do not plant or transplant cereal grains in the treated area for at least 120 days following an application of this product."
12. Revise the sentence under Use Precautions to read "DO NOT OVERTREAT: The use of higher than **directed** rates may cause injury."
13. Revise the Rate of Application directions so that it also includes red beets, since only spinach is mentioned currently.
14. Change the heading from "PRACTICES TO LOWER THE POTENTIAL FOR SPRAY DRIFT" to "SPRAY DRIFT MANAGEMENT". Also, the Boom Length, Swath Adjustment, and Temperature Inversions statements should be relocated to above the Advisory Information section since these are required by the RED.
15. Revise the Boom Length statement "1." to read "The boom length must not exceed 70% of the wingspan or 85% of the rotor blade diameter."
16. Change "The applicator should be familiar with..." to "The applicator must be familiar with...Aerial Drift Reduction Information."
17. Remove "ADVISORY" from the heading "AERIAL DRIFT REDUCTION ADVISORY INFORMATION".
18. On page 5 under Sensitive Areas, change "The pesticide should be applied..." to "The pesticide must be applied..."

A stamped copy of your labeling is enclosed for your records. Submit one (1) copy of the revised final printed label for the record before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Spin-Aid® HERBICIDE

FOR AGRICULTURAL USE ONLY

Postemergence Herbicide for Control of Weeds in Spinach (Grown for Processing and Seed Only) and Red Beets

ACTIVE INGREDIENT: Phenmedipham*	15.9%
INERT INGREDIENTS:	84.1%
TOTAL	100.0%

*3-methoxycarbonylamino-phenyl-3-methylcarbanilate
 Contains 1.3 lbs. active ingredient per gallon.
 This product contains the toxic inert ingredient isophorone.
 *CAS Number: 13684-63-4

ACCEPTED
 EPA Reg. No. 264-616
 with COMMENTS
 In EPA Letter Dated:
 OCT 6 2008

EPA Est. No. 407-IA-02

KEEP OUT OF REACH OF CHILDREN

WARNING — AVISO

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

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.)

264-616 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 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. • Have person sip a glass of water if able to swallow. • Do not give anything by mouth to an unconscious person.
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 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.
<p>For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.</p> <p>Have the product container or label with you when calling a poison control center or doctor or going for treatment.</p>	
<p>NOTE TO PHYSICIAN: Empty stomach contents by gastric lavage. Avoid aspiration.</p>	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

HARMFUL IF SWALLOWED. MAY PRODUCE SEVERE IRRITATION OF EYES AND IRRITATION OF SKIN. AVOID BREATHING SPRAY MIST. AVOID CONTACT WITH SKIN AND EYES.

Do not apply when weather conditions favor drift from treated areas.

AVOID CONTAMINATION OF FEED AND FOODSTUFFS.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are barrier laminate or butyl rubber ≥ 14 mils. If you want more options, follow the instructions for category B on an EPA chemical resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes and socks, and
- Chemical-resistant gloves for mixers and loaders.

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/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

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

Remove and wash contaminated clothing before reuse.

Remove clothing/PPE 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.

ENGINEERING CONTROLS 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. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to fish and aquatic organisms in adjacent aquatic sites. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container and keep closed. Store in a cool, dry place. Do not use or store near heat or open flame.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill; or by other procedures approved by State and local authorities.

DO NOT REUSE THIS CONTAINER**DIRECTIONS FOR USE**

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

Read the entire Directions for Use before using this product.

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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

GENERAL INFORMATION

SPIN-AID® is a selective postemergence herbicide for use in spinach (grown for processing and seed) and red (table) beets.

Note: Use SPIN-AID® Herbicide on spinach only when temperatures are below 75°F in order to prevent possible injury. SPIN-AID® is effective for control of the following weeds:

- Wild mustard *Brassica kaber*
- Common lambsquarters *Chenopodium album*
- Shepherdspurse *Capsella bursa-pastoris*
- London rocket *Sisymbrium irio*
- Nettleleaf goosefoot *Chenopodium murale*
- Groundcherry *Physalis lanceifolia*
- Coast fiddleneck *Amsinckia intermedia*
- Common chickweed *Stellaria media*
- Purslane *Portulaca oleracea*
- Common ragweed *Ambrosia artemisiifolia*
- Annual sowthistle *Sonchus oleraceus*

For best results, spray when the weeds are at the two-leaf stage.

USE PRECAUTIONS

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

DO NOT APPLY SPIN-AID® TO SPINACH LATER THAN 21 DAYS PRIOR TO HARVEST. DO NOT APPLY SPIN-AID® TO RED BEETS LATER THAN 60 DAYS PRIOR TO HARVEST.

DO NOT ROTATE WITH CEREAL GRAIN CROPS FOR 120 DAYS FOLLOWING POST-EMERGENCE APPLICATION OF SPIN-AID®.

SPIN-AID® MAY CAUSE INJURY IF THE CROP IS UNDER STRESS FROM ONE OR MORE OF THE FOLLOWING CONDITIONS:

- Rapid climatic changes from cool, overcast days, to hot (75°F or over), bright days. Windy conditions or drought
- Use of a preplant or preemergence herbicide or other chemicals
- Insect or disease injury
- Close cultivation

Not all cultivars/varieties for processing or seed production have been tested for sensitivity to SPIN-AID®. Consult with your seed provider, your local Bayer CropScience representative and/or other knowledgeable agricultural professionals for advice on varietal tolerance before applying SPIN-AID®. If the tolerance of a variety is not known, apply SPIN-AID® to a small area to first determine if this variety is tolerant prior to spraying large acreages of that variety.

If stress conditions are present, delay application in order to give plants a chance to recover.

If extreme weather conditions are of short duration, delay spraying until the end of such a period.

If SPIN-AID® applications must be made on days with extreme temperature and/or brightness, delay spraying until evening.

DO NOT OVERTREAT: The use of higher than recommended rates may cause injury.

Do not spray while dew is present.

Rainfall within 6 hours of spraying may reduce weed kill. Do not allow spray drift to contact adjacent crops which may be injured by spray drift.

IMPORTANT

SPIN-AID® Herbicide may cause temporary growth retardation and/or chlorosis or tip-burn. Crops usually resume normal growth within 10 days.

When used as directed, SPIN-AID® at full rates is selective in spinach and red beets past the 4 to 6 true-leaf stage. Crops may be severely injured if treated before the 4 to 6 true-leaf stage at the full rates of 3 to 6 pints per acre. For using alternative lower rates on smaller spinach see directions for split applications under the rate of application section below.

The stage of growth of the weeds is very important for satisfactory control.

For best results, spray when the weeds are at the two true-leaf stage. Best results are obtained when the weeds are actively growing and are not under water or heat stress.

MIXING THE SPRAY: MAKE SURE THE SPRAYER IS CLEAN.

SPIN-AID® is an emulsifiable concentrate. The formulation contains sufficient wetting agents for optimum coverage. Do not add additional wetting agents or other spray adjuvants. Add sufficient water to fill the lines. Then add the desired amount of SPIN-AID® and

the remaining quantity of water with the bypass agitator running. Bypass agitation is sufficient. Mechanical agitation is not necessary. Only use freshly prepared spray emulsions.

Always spray immediately after preparing the spray solution. Prepare only enough spray solution to last less than four hours.

RATE OF APPLICATION

- **By Ground:** Apply SPIN-AID® at the rate of 3 to 6 pints per acre to spinach at the 4-true leaf stage or larger in 10 to 20 gallons of water on a broadcast basis.
- For band application, see dosage chart. TOO MUCH WATER MAY CAUSE PRECIPITATION.

DOSAGE CHART FOR BAND APPLICATIONS

Broadcast Equivalent	Band Rate	
	Band Width	Row Spacing 26"
3 pints/acre	5"	9.2 fl. oz.
	7"	12.9 fl. oz.
6 pints/acre	5"	18.5 fl. oz.
	7"	25.8 fl. oz.

- **By Air:** Apply SPIN-AID® at the rate of 3 to 6 pints per acre to spinach at the 4-true leaf stage or larger using 5 to 20 gallons of spray per acre.

SPLIT APPLICATION METHOD USING REDUCED RATES

SPIN-AID® can be applied as a split application for weed control. The first application of only 2 ½ to 3 pints per acre can be applied at the 2 to 4-leaf stage of spinach (instead of the 4 to 6 true-leaf stage) followed by a sequential application of only 3 pints, 4 to 6 days later. Use a maximum of 6 pints per acre per year total with the split application method.

Avoid phytotoxic spray drift to nontarget crops during application of SPIN-AID®.

DO NOT APPLY WHEN WIND SPEED IS OVER 10 MILES PER HOUR. AVOID APPLICATIONS WHEN CONDITIONS FAVOR DRIFT.

PRACTICES TO LOWER THE POTENTIAL FOR SPRAY DRIFT

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interactions 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.

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 $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream, and never be pointed downward more than 45 degrees.

Where States or Tribes have more stringent regulations, they should be observed.

The applicator should be familiar with, and take into account, the information covered in the following section: "Aerial Drift Reduction Advisory Information".

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*.)

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:

The boom length must not exceed 70% of the wingspan or 85% of the rotor blade diameter.

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.

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 at the downwind edge of the application area 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 windspeeds of 2 to 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.

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 any type of application into temperature inversions. 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 the 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 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, nontarget crops) is minimal (e.g., when wind is blowing away from sensitive areas).

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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.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the 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 the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

NET CONTENTS: 2.5 gallons

Spin-Aid® is a registered trademark of Bayer

Produced for



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)**

Spin-Aid Herbicide (PENDING) EPA PDCI 10/19/07.