



United States
Environmental Protection Agency
 Washington, DC 20460

- Registration
- Amendment
- Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 524-500	2. EPA Product Manager Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Outrider herbicide	PM # 25	
5. Name and Address of Applicant (Include ZIP Code) Monsanto Company 600 13 th St., N.W., Suite 660 Washington, DC 20005 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

- | | |
|--|--|
| <input type="checkbox"/> Amendment - Explain below. | <input type="checkbox"/> Final printed labels in response to Agency letter dated |
| <input type="checkbox"/> Resubmission in response to Agency letter dated | <input type="checkbox"/> "Me Too" Application. |
| <input checked="" type="checkbox"/> Notification - Explain below. | <input type="checkbox"/> Other - Explain below. |

NOTIFICATION
 JUN 3 0 2003

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 Submission of Supplemental Labeling.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) <u>Plant Cells</u>
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per Container	If "Yes" Package wgt. No. per Container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container Various	
		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Dr. Marsha C. Gray	Title Registration Manager	Telephone No. (Include Area Code) (202) 783-2460
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 		
3. Title Registration Manager		
4. Typed Name Rhonda M. Mannion 314/ 694-8785		5. Date 12 June 2003

SUPPLEMENTAL LABELING

READ THE ENTIRE LABEL FOR OUTRIDER® HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

When using Outrider herbicide as permitted according to this supplemental labeling, read and follow all applicable directions, restrictions, and precautions on the label pamphlet provided with the pesticide container and on this supplemental labeling. This supplemental labeling must be in the possession of the user at the time of pesticide application.



EPA Reg. No. 524-500

Outrider is a registered trademark of Monsanto Technology LLC.

FOR AERIAL APPLICATION IN OKLAHOMA AND TEXAS ONLY.

**Keep out of reach of children.
CAUTION!**

In case of an emergency involving this product or for user safety information on this product,
Call Collect, day or night, 314-694-4000.

DIRECTIONS FOR USE

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

This labeling must be in the possession of the user at the time of herbicide application.

See "GENERAL INFORMATION" and "MIXING" sections of the label pamphlet for Outrider herbicide for essential product performance information.

NOTE: Applications of this product should not contact leaves of desirable plants since foliar injury, discoloration, or death may result.

Environmental Hazards

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

This pesticide is highly toxic to non-target plants. 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 may be hazardous to plants in neighboring areas. Do not contaminate when cleaning of equipment or disposing of washwaters or rinsate.

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of Federal Laws.

RECOMMENDATIONS

Outrider herbicide may be used to control or partially control johnsongrass and other weeds in Bermudagrass, bahiagrass, and tall fescue on roadsides and other labeled noncrop sites.

Outrider herbicide may be applied through aerial equipment (fixed wing or helicopter). Calibrate spray equipment before use. Use the recommended rate of this product in 5 to 15 gallons of water per acre. When applying Outrider herbicide by air in 5 gallons of spray solution per acre, a spray solution pH of 6.0 to 8.0 is optimum. Addition of 2 to 4 quarts of a 7 percent ammonia solution for every 100 gallons of spray solution will increase the pH of the spray solution to within the optimal range. Failure to adjust the pH of spray solution may result in reduction in weed control. Fill the spray tank to about ¾ of the desired volume prior to mixing. With agitation, add Outrider herbicide and nonionic surfactant to the spray solution. Then adjust the spray solution pH with the ammonia solution.

CAUTION: Do not use ammonia with chlorine bleach as dangerous gases will form.

Spray solutions should be applied within 24 hours after mixing.

Spray Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to labeled non-crop sites. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

AERIAL SPRAY DRIFT REQUIREMENTS

1. The distance of the outermost 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. Where states have more stringent regulations, they should be observed.

Importance of 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 the "Wind", "Temperature and Humidity", and "Temperature Inversions" sections of this label).

Controlling Droplet Size

- **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- **Pressure:** Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. 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 backwards, parallel to the airstream, will produce larger droplets than other orientations. Significant deflection from the 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 larger droplets than other nozzle types.
- **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 the exposure of the droplets to evaporation and wind.

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 droplets, etc.).

Wind

Drift potential is lowest between wind speeds of 2 to 10 miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 miles per hour 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 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

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

Sensitive Areas

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

Read the "Limit of Warranty and Liability" in the label pamphlet for Outrider Herbicide before using. These terms apply to this supplemental labeling and if these terms are not acceptable, return the product unopened at once.

MONSANTO



4/4

MONSANTO COMPANY
500 15TH STREET, N.W.
SUITE 600
WASHINGTON, D.C. 20005
<http://www.monsanto.com>

12 June 2003

Hand Delivered

Document Processing Center (NOTIF)
Office of Pesticide Programs
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2,
1921 Jefferson Davis Highway
Arlington, VA 22202-4501

Attention: Mr. Jim Tompkins (7505C)
Product Manager (Team 25)

Subject: Outrider Herbicide (EPA Reg. No. 524-500). Submission of Final Printed Supplemental Label for Aerial Applications in Oklahoma and Texas.

Dear Mr. Tompkins:

Aerial application is currently approved on Registration Number 524-500 under the Maverick brand name. Monsanto now wishes to include aerial application under Outrider herbicide and is herein submitting the following supplemental label:

Outrider Herbicide: For Aerial Applications in Oklahoma and Texas Only (Reg. No. 524-500)

Enclosed are three copies of the final printed supplemental label (print plate no. 71014B1-13). The text of the final printed supplemental label is the same as the associated aerial application text of the EPA approved label dated 2 April 2003.

Should you have any questions, please contact Dr. Marsha Gray at our Washington office (202) 783-2460, or me directly at (314) 694-8785 or rhonda.m.mannion@monsanto.com.

Sincerely,

Rhonda M. Mannion
Registration Manager

cc: Marsha Gray / DC Office
Vickie Walters / EPA
D. Hinton / A2ND
D. Fee-White / A2NC