

33906-11

5-09-2003

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Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval Expires 2-28-95



United States
Environmental Protection Agency
Washington, DC 20460

Registration

Amendment

Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 33906-11 / 33906-11-524	2. EPA Product Manager Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) NC-398 WG / Yukon Herbicide	PM # 25	
5. Name and Address of Applicant (Include ZIP Code) Nissan Chemical Industries, Ltd. c/o 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
MAY 09 2003

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

Submission of California Aerial Application Supplemental.

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) Plant Cells
* 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 <i>Rhonda M. Mannion</i>	3. Title Registration Manager Agent for Nissan Chemical Industries, Ltd.	
4. Typed Name Rhonda M. Mannion 314/ 694-8785	5. Date 11 March 2003	

MONSANTO



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MONSANTO COMPANY
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SUITE 600
WASHINGTON, D.C. 20005
<http://www.monsanto.com>

11 March 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: **Yukon Herbicide (EPA Reg. No. 33906-11-524). Submission of Final Printed Supplemental Label for Aerial Applications in California.**

Dear Mr. Tompkins:

Monsanto Company currently distributes NC-398 WG herbicide (Reg. No. 33906-11) as the supplemental distributor product Yukon herbicide (Reg. No. 33906-11-524). Monsanto is seeking registration of Yukon herbicide in the State of California; the current Yukon herbicide label contains aerial application instructions for which California is requiring more restrictive language. In order to obtain the registration and ultimate sale of Yukon herbicide in 2003, Nissan Chemical Industries and Monsanto Company are herein notifying the Agency of supplemental labeling which incorporates more restrictive directions for aerial applications in the State of California.

Enclosed are three copies of the final printed supplemental label for Aerial Applications of Yukon Herbicide in California. The text of the final printed supplemental label is the same as the *Aerial Application* section of the EPA approved label dated 4 February 2002 with the following exceptions:

- California DPR required the **Spray Drift Management** Section to be more restrictive. The following modifications were made:
 - An additional droplet size restriction was added.
"Each operating nozzle shall produce a droplet size not less than 500 microns volume median diameter with no more than 10 percent of the diameter by volume less than 200 microns"
 - The effective boom length was reduced from 3/4 to 2/3 the wingspan or rotor length
- Prunes and cotton were added as sensitive crops along with associated buffer zones.

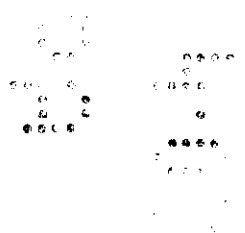
Should you have any questions, please contact Dr. Marsha Gray at our Washington office (202) 783-2460 or me directly at (314) 694-8785 or rhonda.m.mannion@monsanto.com.

Sincerely,



Rhonda M. Mannion
*Monsanto Registration Manager and Authorized Agent for
Nissan Chemical Industries, Ltd.*

- cc: Marsha Gray / DC Office
- Vickie Walters / EPA
- T. Sato / Nissan Chemical
- T. Schafer / A2ND
- D. Fee-White A2N



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SUPPLEMENTAL LABELING

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

"Label" as used in this supplemental labeling refers to the label booklet for YUKON herbicide and this supplemental.

YUKON HERBICIDE

NOTIFICATION

MAY 09 2003

EPA Reg. No. 33906-11-524

YUKON is a Trademark of Monsanto LLC.

AERIAL APPLICATIONS IN CALIFORNIA ONLY

Keep out of reach of children
CAUTION!

In case of emergency involving 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 label must be in the possession of the user at the time of application.

See the "GENERAL INFORMATION" and "MIXING INSTRUCTIONS" sections of the label booklet for YUKON™ herbicide for essential product information.

APPLICATION EQUIPMENT AND INSTRUCTION

Applications should be made by ground or aerial equipment to healthy, actively growing weeds. For best results, avoid applications when weeds are under drought stress, disease, or insect damage. Rainfall or irrigation occurring within 4 hours after application may also reduce effectiveness.

Aerial Applications: Apply YUKON herbicide uniformly with properly calibrated equipment in 5 to 15 gallons of water per acre. Thoroughly clean equipment prior to mixing spray solution. Avoid streaking, skips, overlaps, and spray drift during applications. This product 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).

Avoid disturbing (e.g., cultivation) treated areas for at least 7 days following application.

Thoroughly clean application equipment immediately after the use of YUKON herbicide, following the directions under Procedure for Cleaning Spray Equipment.

Spray Drift Management

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE 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. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. Each operating nozzle shall produce a droplet size not less than 500 microns volume median diameter with no more than 10 percent of the diameter by volume less than 200 microns.
2. The distance of the outer most nozzles on the boom must not exceed 2/3 the length of the wingspan or rotor.
3. 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.
4. Applications should not be made at a height greater than 10 feet above the top of the target plants unless greater height is required for aircraft safety.

The importance of spray 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 may not prevent drift if applications are made improperly or under unfavorable environmental conditions (see the following "Wind", "Temperature and Humidity", and "Temperature Inversion" sections of this advisory).

Controlling initial droplet size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher flow rates 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 the spray stream 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.

Controlling placement of spray droplets:

- **Boom length** - For some use patterns, reducing the effective boom length to less than 2/3 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application height** - Applications should not be greater than 10 feet above the top of the tallest plants unless a greater height is required for aircraft safety. Greater application heights result in greater droplet size reduction through evaporation and greater movement in air currents. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

- **Application speed** - Slower aircraft speeds within a safe range will produce less air turbulence and fewer small droplets.
- **Swath adjustment** - When applications are made with a cross-wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (wind speed, droplet size, etc.).

Key environmental factors:

- **Wind** - Drift potential is lowest between wind speeds of 3 to 10 mph. However, many factors including droplet size and equipment type determine drift potential at any given speed. Application should be avoided when wind speeds are below 3 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Applicators 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 occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable air currents that are 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 detector. 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:

Pesticides 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).

Sensitive Crops:

Cotton Prunes

Buffer Zones:

Aerial applications shall not be made closer than four miles from sensitive crops.

Read the "LIMIT OF WARRANTY AND LIABILITY" statement in the label booklet for YUKON herbicide before using. These terms apply to this SUPPLEMENTAL LABELING, and if these terms are not acceptable return the product unopened at once.

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DISTRIBUTED BY:
MONSANTO COMPANY
ST. LOUIS, MISSOURI 63167 U.S.A.

Formulated in the United States, contains the Active Ingredient halosulfuron-methyl which is made in Japan by Nissan Chemical Industries, Ltd. Product protected by U.S. Patent No. 4,668,277.