File 10\$14

PM 25 524-449

# United States Environmental Protection Agency Washington, D.C. 20460

Office of Prevention, Pesticides and Toxic Substances

OCT 13 1993

Lydia A Suba MONSANTO CO AGENT FOR: MONSANTO AGRICULTURAL CO 700 14TH ST, N.W. SUITE 1100 WASHINGTON DC 20005

Subject: Label Amendment Submission of 06/14/93 in Compliance with WPS Labeling Requirements EPA Reg No. 524-449 EXPEDITE GRASS & WEED PLUS RESIDUAL HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR No dees 93-7 and 93-11, which reflect the WPS labeling require: acts of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL) Room 266A Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text" must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,

Tames Tompkins, Deputy Chief Registration Support Branch Registration Division (H7505W)

# Expedite® Grass & Weed Plus Residual Herbicide

EPA Reg. No. 524-449

Labeling to comply with Worker Protection Standard

for

1.0 gallon container

ACCEPTED
with COMMENTS
in EPA Letter Dated

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the posticide regimered under EPA Reg. No.

Monsanto Company 1993

# GRASS & WEED PLUS RESIDUAL HERBICIDE by Monsanto

FOR MONSELECTIVE POSTEMERGENCE AND RESIDUAL CONTROL

Contains glyphosate, the active ingredient in Roundup® herbicide.

[The Roundup Logo]

Specially formulated for ExpediteTM Application Equipment.

Complete Directions for Use

EPA Reg. No. 524-449

Covers from 10,600 to 14,100 square feet.

●<sup>TM</sup>Expedite is a registered trademark of, and used under license from, Nomix Plc.

<sup>®</sup>Roundup is a registered trademark of Monsanto Company.

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**OMONSANTO COMPANY 1993** 

MONSANTO COMPANY AGRICULTURAL PRODUCTS ST. LOUIS, MISSOURI 63167 U.S.A. Read the entire label before using this product.

Use only according to label instructions.

Read "LIMIT Or WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

REFORMULATION IS PROHIBITED. This package may be used to refill 750 ml containers that are specifically labeled for refilling with this product. Follow refilling instructions on side panel of this container.

#### PRECAUTIONARY STATEMENTS

## Hazards to Humans Kand Domestic Animals

Keep out of reach of children.

#### CAUTION!

HARMFUL IF INHALED.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

Avoid breathing vapor or spray mist.

Wash-thoroughly with soap and water after handling.

Remove-contaminated-clothing-and-wash-before-reuse-

# Personal Profestive Equipment)

Some maker a legging processing real processing the second second

Long pants and shoes plus accks

Follow manufacturer selectructions for cleaning/maintain new PPF.

If no such instructions for washables use detergent and how water.

Keep and washePPF separately from other laundry.

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FIRST AID: IF INHALED, remove individual to fresh air. Seek medical attention if breathing difficulty develops.

In case of a human health emergency involving this product, Call Collect, day or night, (314) 694-4000.

BEST AVAILABLE COPY

#### 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 cleaning solutions.

## Physical or Chemical Hazards

Apply this product ONLY through Expedite application equipment designed for its use. DO NOT STORE OR APPLY THIS PRODUCT IN ANY OTHER TYPE OF CONTAINER, PARTICULARLY GALVANIZED STEEL OR UNLINED STEEL CONTAINERS OR SPRAY TANKS. This product will react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

#### ACTIVE INGREDIENT:

75.8 <del>1</del>

Contains petroleum distillates.

\*Contains 125 grams per litre or 1.04 pounds per U.S. gallon of the active ingredient, glyphosate, in the form of its isopropylamine salt(Equivalent to 93 grams per litre or 0.77 pounds per U.S. gallon of the acid, glyphosate) and 120 grams per litre or 1.0 pounds per U.S. gallon of the active ingredient, oryzalin.

This product is protected by U.S. Patent No. 4,405,531. Other patents are pending. No license granted under any non-U.S. patent(s).

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency results the for periode regulation.

## 



(SUPERPRO. LBL)



## Storage and Disposal

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

#### STORAGE:

Store this product between 32°F and 100°F in its original container and in a secured storage area.

#### DISPOSAL:

Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is destroyed. Do not reuse container.

When container is completely emptied, 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

This product is a mixture of a nonselective postemergence and a selective preemergence weed killer. Visible symptoms of postemergence control may require a week or more to appear, with

complete browning usually occurring in 1 to 4 weeks. Symptoms are a gradual wilting and yellowing of the treated plant foliage followed by browning and deterioration of both shoots and roots.

The preemergence portion of this product will remain stable on the soil surface up to 21 days. In the absence of timely rainfall for activation, irrigation can be used to move this product into the soil surface. If this product is not activated by rainfall or irrigation within 21 days of application, erratic preemergence weed control may result.

This product is recommended for commercial, industrial, noncropland and residential vegetation management in areas such as airports, christmas tree plantations, ditchbanks, farmsteads, fencerows, greenhouses, golf courses, highways and roadsides, industrial plant sites, institutional sites, municipalities, lawns, lumberyards, nurseries, nonbearing trees and vines, parking areas, parks, playgrounds, petroleum tank farms, pipeline, power, telephone and utility rights-of-way, railroads, schools, storage areas and similar sites.

This product may be used as a directed application to control undesirable vegetation growing around established ornamentals, trees or shrubs. To avoid injury on desirable plants, prevent spray r drift contact with foliage, stems or green (immature) tree bark.

Do not apply this product where the likelihood of runoff onto lawn areas containing dichondra or cool-season turfgrass species exist as severe injury may occur.

Reseeding of desirable species should be delayed by 120 days following an application of this product.

Rainfall or irrigation within 2 hours after application may wash the product off plant foliage resulting in reduced postemergence activity.

THIS PRODUCT CAN INJURE OR DESTROY ALL VEGETATION CONTACTED. AVOID SPRAY CONTACT WITH THE FOLIAGE OF DESIRABLE TURF, ORNAMENTALS, SHRUBS OR TREES. DO NOT APPLY OVER THE TOP OF DESIRABLE PLANTS.

#### How to Apply

Apply this product as a uniform spray over the foliage of undesirable vegetation. Avoid applications during windy conditions, as spray drift or swath displacement may cause damage to any vegetation contacted. Use only Expedite application equipment when applying this product.

To select general flow rate settings for applying this product, use the Expedite Set-N-Spray settings listed in the following application guide. The letters followed by a number (Al...G5) represent equipment settings for flow rates within the application range recommended for this product. If calibration is desired to obtain equipment settings, see the "HOW TO CALIBRATE" section of this label.

A range of application rates are represented in the following application guide. Use the higher rate in the range on established perennial weeds or where longer residual control is needed. For best results, make applications before weeds are allowed to form a dense canopy.

When the desired head setting is obtained, install the spinner as indicated in the following guide. Best results are obtained when the spinner is producing a uniform spray pattern. This is obtained by holding the lance head as close as practical to the top of the weed canopy(less than 4 inches) and increasing the spinner speed to obtain the correct swath width. The square spinner is recommended for applying this product.

# EXPEDITE GRASS & WELD PLUS RESIDUAL HERBICIDE APPLICATION GUIDE

#### SET-N-SPRAY SETTINGS

SPINNER TYPE	SPRAY SWATH WIDTH	1.5 MPH	WALKING SPEED 2.25 MPH	
Spiral Spinner	6"	B2 to B4	B5 to C3	
	12*	C3 to D2	D3 to F2	
Square Spinner	18#	D3 to F2	G4 to *	

The recommended rate range for this product represents 6 to 8 pounds total active ingredient or 3 to 4 gallons of product per acre.

\*The flow rate through the equipment is not adequate to apply the recommended application rates.

#### How to Calibrate

1. Determine the proper Multi Flow units required from the following calibration guide. The number of Multi Flow units required is where the swath width row intersects the walking

- speed column. For example, for a 1.5 mph walking speed and a 12" swath width, 22 to 29 Multi Flow units are recommended.
- 2. Before calibrating, the lance must be primed to remove trapped air. To prime the lance, set the head setting to G+ and depress the trigger until all air is removed from the lance. Priming must be done with the head of the lance held above the handle but below the level of the product container.
- 3. Remove the spinner and attach the Expedite calibration flow cup.
- 4. For the initial calibration check, set the equipment within the range of Set-N-Spray settings listed in the application guide in the "HOW TO APPLY" section. Lower the lance head to the spraying position, depress the trigger for 30 seconds and compare the measured volume to the desired Multi Flow units.
- 5. To remove the product from the calibration cup, raise the lance above head level and depress the trigger long enough to allow the product to flow back into the lance. Do not allow air to reenter the lance. If air enters the lance, it must be reprimed.
- If required, adjust the head setting and repeat the process until the desired Multi Flow units are obtained.
- 7. When the desired head setting is obtained, remove the calibration cup and reattach the square spinner and follow the instructions in the "HOW TO APPLY" section on how to spray this product.

# EXPEDITE GRASS & WEED PLUS RESIDUAL HERBICIDE CALIBRATION GUIDE

# 30 SECOND MULTI FLOWIN MEASUREMENT\*

SPINNER TYPE	SPRAY SWATH WIDTH	1.5 MPH	WALKING SPEED 2.25 MPH	<u> </u>
	6"	11 to 14	16 to 22	
Spiral Spinner	12"	22 to 29	32 to 43	
Square Spinner	18"	32 to 43	48 to 65**	

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The recommended rate range for this product represents 6 to 8 pounds total active ingredient or 3 to 4 gallons of product per acre.

\*One Multi Flow equals 0.8 Milliliter.

\*\*The flow rate through the equipment may not be adequate to apply the recommended rates at these walking speed and swath width combinations.

THMulti Flow is a trademark of Nomix, Plc.

### Cleaning of Equipment

The Expedite application equipment must be cleaned after each use and prior to storage. Use Expedite cleaner to remove residues of this product. To clean the lance, connect the lance to the cleaner box, set the head setting to G+ and let the cleaner flow until it runs clear. Disconnect the lance from the cleaner box and remove the remaining cleaner from the lance. Do not drain cleaner back into the box. With extended use of this product, periodic cleaning of the lance head cap is recommended to prevent product buildup. Follow the procedure outlined in the equipment operating instructions for removing and replacing the head cap. Failure to properly clean the equipment may result in equipment failure or injury to subsequently treated desirable vegetation. thorough cleaning, equipment may be used to apply other products, especially formulated for use in Expedite application equipment.

Wastes resulting from the use or cleaning of equipment that cannot be used or chemically reprocessed should be disposed of in accordance with applicable Federal, state or local procedures. See the "Storage and Disposal" section of this label for more information.

#### WEEDS CONTROLLED

When applied as recommended under the conditions described, this product provides POSTEMERGENCE control of many grasses and broadleaf weeds, including the following:

Bahiagrass
Barnyardgrass
Bentgrass
Bermudagrass\*
Bindweed, field\*
Bluegrass, annual
Brome, Downy
Bromegrass, smooth
Cheat
Chickweed
Clover: red, white

Fescues
Johnsongrass
Lettuce, prickly
Nutsedge: purple, yellow
Mustard, tansy
Orchardgrass
Quackgrass
Pennycress, field
Pigweed: redroot, smooth
Ragweed, common
Ryegrass: annual, perennial

Crabgrass
Dallisgrass
Dandelion
Dock, curly
Foxtail
Geranium, Carolina
Goosegrass
Lambsquarters, common

Sandbur, field Shepherdspurse Sowthistle Stinkgrass Thistle, Canada Timothy Vaseygrass

#### \*Partial control

When applied as recommended under the conditions described, this product provides PREEMERGENCE control of many broadleaf and grass weeds, including the following:

Barley, little Barnyardgrass Bictercress Bluegrass, annual Brachiaria Carpetgrass Chickweed, common Crabgrass: large, smooth Crowfootgrass Cupgrass, southwestern Fiddleneck, coast Filaree: redstem, whitestem Foxtail: bottlegrass, bristlegrass, giant, green, robust, yellow Groundsel, common Henbit Horseweed\* Johnsongrass(seedling only) Jur plerice Knotweed, prostrate Ladysthumb\* Lambsquarter Lettuce, prickly\* Lovegrass: Mexican, orgatt Mallow, common\* Milkweed, climbing\*

Morningglory\* Mustard: black, wild\* Nightshade, black\* Oat, wild Panicum: fall, Texas Pigweed: prostrate, redroot, rough, spring, tumble Puncturevine Purslane, common Pusley, Florida Ragweed, common\* Rocket, London Rockpurslane, desert Ryegrass, annual Sandbur, field Shepherdspurse Smartweed\* Sowthistle\* Sprangletop, red Spurge, prostrate Spurge, spotted\* Teaweed(Prickly sida) \* Velvetleaf\* Wheat, volunteer Witchgrass Woodsorrel, yellow

<sup>\*</sup>This product provides suppression of these species.

#### LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyers and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with product; other than those set forth in the Directions, application to or contact with desirable vegetation, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

875.15-400.06/53

EPA Reg. No. 524-449

#### CHONSANTO COMPANY 1993

|In case of a human health emergency involving this product, Call Collect, | |day or night, (314) 694-4000.

MONSANTO COMPANY
AGRICULTURAL PRODUCTS
ST. LOUIS, MISSOURI 63167 U.S.A.