PM 25 524 - 432

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

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OCT 1 3 1993

Office of Prevention, Pesticides and Toxic Substances

Dr Russell P Schneider 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. 524-432 EXPEDITE GRASS & WEED HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, 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 Notices 93-7 and 93-11, which reflect the WPS labeling requirements 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.

James Tompkins, Deputy Chief Registration Support Branch Registration Division (H7505W) MONSANTO CO
EXPEDITE GRASS & WEED HERBICIDE
524-432 06/14/93
Original Submission

Delete the following statement from the label: "Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions on an EPA chemical resistance category selection chart".

# Expedite® Grass & Weed Herbicide

EPA Reg. No. 524-432

Labeling to comply with Worker Protection Standard

for

750 ml container

With COMMENTS
In EPA Letter Dated

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

Monsanto Company 1993

# EXPEDITED GRASS & WEED HERBICIDE by Monsanto

### High Visibility - Migh Mark For Vegetation Control

Contains glyphosate, the active ingredient in Roundup® herbicide.

[The Roundup Logo]

Specially formulated for ExpediteTH Application Equipment.

Complete Directions for Use

EPA Reg. No. 524-432

Covers from 2,800 to 17,000 square feet

•TMExpedite is a registered trademark of, and used under license from, Nomix Plc.
•Roundup is a registered trademark of Monsanto Company.

1993-2 A-200.46/53

**MONSANTO 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 OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

REFORMULATION IS PROHIBITED. This container may be refilled with this product from 1 gallon containers specifically labeled for refilling. Follow refilling instructions on the side panel of the 1 gallon container.

#### PRECAUTIONARY STATEMENTS

Hazards to Eumans and Domestic Animals

Keep out of reach of children.

WARMING!

**TER** 



CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY.

HARMFUL IF SWALLOWED OR INHALED.

Do not get in eyes, on skin or on clothing.

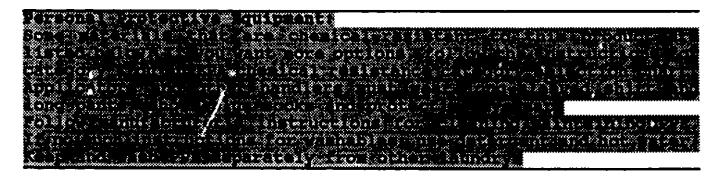
Wear goggles or face shield.

BEST AVAILABLE COPY

Avoid breathing vapor or spray mist.

Wash-thoroughly with soap and water after handling.

Remove-contaminated clothing and wash before reuse.



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# FIRST AID: IF IN EYES, immediately flush with plenty of water for

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at least 15 minutes. Get medical attention.

IF ON SKIN, wash with plenty of soap and water. Get medical attention if irritation persists.

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

IF SWALLOWED, drink promptly a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol. Get medical attention.

KEEP PEOPLE AND PETS OFF TREATED AREA UNTIL FOLIAGE IS DRY.

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

#### 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

BEST AVAILABLE COPY

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, weldor's torch, lighted cigarette or other ignition source.

#### ACTIVE INGREDIENT:

\*Glyph>sate, N-(phosphonomethyl)glycine in the form of its isopropylamine salt ......18.3% INERT INGREDIENTS:......81.7%

100.0%

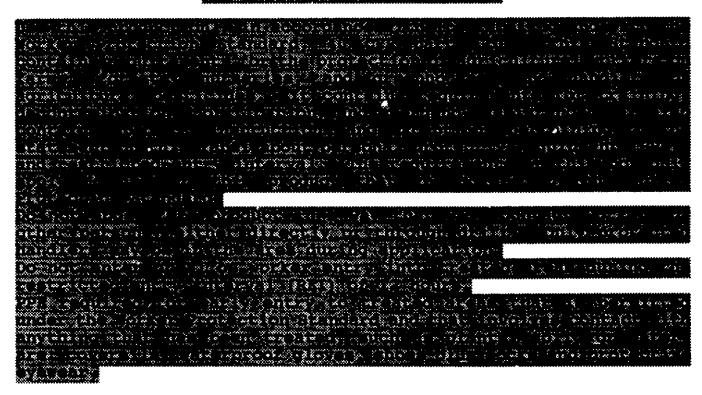
\*Contains 199 grams per litre or 1.66 pounds per U.S. gallon of the active ingredient, glyphosate, in the form of its isopropylamine salt. Equivalent to 147 grams per litre or 1.23 pounds per U.S. gallon of the acid, glyphosate. This product is protected by U.S. Patent No. 4,405,531. Other patents are 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.

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## CORPORATION CONTRACTORS CONTRACTORS

Storage and Disposal

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(GRASS & WEED COMPACT)

(3/1/93)



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.

When container is completely emptied through Expedite application equipment, or can no longer be refilled, 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 nonselective weed killer that is applied, using Expedite application equipment, to the foliage of actively growing weeds. It is absorbed by the leares and moves throughout the stem and roots to control the entire plant. Visible symptoms of control may require a week or more to appear, with complete browning usually occurring in 2 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. This product will not wash or leach to affect nearby vegetation.

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

THIS PRODUCT CAN INJURE OR DESTROY ALL VEGETATION CONTACTED. AVOID SPRAY CONTACT WITH THE POLIAGE OF DESIRABLE TURF, ORNAMENTALS, SHRUBS OR TREES. DO NOT CONTACT BARK OF TREES OR SHRUBS.

#### WEEDS CONTROLLED

When applied as recommended under the conditions described, this product CONTROL many common annual grasses and broadleaf weeds, including the following:

#### AMMUALS

Barnyardgrass
Bluegrass: annual
Brome, downy
Cheat
Chickweed
Crabgrass
Foxtail
Geranium, Carolina
Goosegrass
Lambsquarters, common

Lettuce, prickly
Mustard, tansy
Pennycress, field
Pigweed: redroot, smooth
Ragweed, common
Ryegrass: annual
Sandbur, field
Shepherdspurse
Sowthistle
Stinkgrass

#### PERENNIALS

When applied as recommended under the conditions described, this product CONTROLS or PARTIALLY CONTROLS many common perennial grasses and broadleaf weeds, including the following:

Bahiagrass
Bentgrass
Bermudagrass\*
Bindweed, field
Bluegrass, Kentucky
Bromegrass, smooth
Clover: red, white
Dallisgrass
Dandelion
Dock, curly

Fescues
Johnsongrass
Nutsedge: purple, yellow
Orchardgrass
Quackgrass
Ryegrass: perennial
Thistle, Canada
Timothy
Vaseygrass

\*Partial control

#### 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 flow rate settings for general weed control, use the Expedite Set-N-Spray settings listed in the following application guide. The letters followed by a number (A1...G5) represent equipment head settings for flow rates within the application range recommended for this product and will provide weed control in most

use situations. For tough-to-control perennial weeds (e.g., Bermudagrass), or dense vegetation, increased flow rates may be needed. For small annual weeds, decreased flow rates may be used. Where the application rate needs to be specific to the type of weeds to be controlled, or if more precise equipment calibration is desired, see the "WEEDS CONTROLLED, HOW TO USE THE CALIBRATION GUIDES" and "HOW TO CALIBRATE" sections of this label for specific flow rates needed and calibration procedures.

### EXPEDITE GRASS & WEED HERBICIDE

#### APPLICATION GUIDE SET-N-SPRAY SETTING

SPINNER TYPE	SPRAY SWATH	WALKING SPEED		
	WIDTH	1.5 MPH	2.25 MPH	
Spiral Spinner	6 <b>#</b>	АЗ	λ5	
-	12 <sup>N</sup>	<b>B1</b>	B4	
Square Spinner	18"	B4	C2	
	24"	C1	D1	
Serrated Spinner	30"	C3	D3	
	36 <sup>n</sup>	D1	E2	

#### NOW TO USE THE CALIBRATION GUIDES

- 1. Determine walking speed
- 2. Select spray width desired
- 3. Select the calibration guide for either annual or perennial weeds.
- 4. Find where the walking speed column intersects with the spray width row on the calibration guide.

- 5. Where the row and column intersect are numbers for the Multi Flow units needed to deliver the desired rate.
- 6. Using the calibration cup provided with the Expedite unit, measure the flow of the product for 30 seconds. If needed, adjust the equipment and measure the flow rate again for 30 seconds. Repeat this procedure until the amount of the product collected matches the desired rate from the calibration guide.
- 7. For specific c. libration procedures, see the "HOW TO CALIBRATE" section of this lawel.

# EXPEDITE GRASS & WEED HERBICIDE CALIBRATION GUIDE

## 30 SECOND MULTI FLOWIN MEASUREMENT\*

SPINNER TYPE	SPRAY AMMUAL WEEDS SWATH WALKING SPEED WIDTH 1.5 MPH 2.25 MPH		
	O'H	2 to 4**	3 to 5
Spiral .	<u> </u>		
Spinner	12"	4 to 7	5 to 11
Square	18#	5 to 11	8 to 16
Spinner		<del> </del>	
	24 <sup>n</sup>	7 to 14	11 to 21
Serrated	30#	9 to 18	13 to 26
Spinner .	<u>.</u>		

<sup>\*</sup>One Multi Flow equals 0.8 milliter.

<sup>\*\*</sup> Use the lower rate when treating small actively growing annual weeds. Increase the rate within the recommended range as height and density of the vegetation increase.

SPINNER TYPE	SPRAY SWATH WIDTH 1.5 MPH		PEREMNIAL WEEDS WALKING SPEED 2.25 MPH	
	6 m	4 to 11***	5 to 16	
	12 <b>"</b>	7 to 21	11 to 32	
Square Spinner	18"	11 to 32	16 to 48	
	24*	14 to 42	22 to 63	
Serrated Spinner	30 <sup>#</sup>	18 to 53	26 to 79	
	36 <sup>m</sup>	21 to 64	32 to 95	

<sup>\*</sup>One Multi Flow equals 0.8 milliter.

#### HOW TO CALIBRATE

- 1. Attach the Expedite calibration flow cup to the Expedite equipment. Remove spinner, if attached.
- 2. Connect the product container and prime the equipment to remove the trapped air. Priming must be done with the head of the lance held above the handle but below the level of the product container.
- 3. Lower the lance head with attached calibration cup to spraying position.
- 4. Depress the trigger with the power on. Collect the product for a measured period of time, such as 30 seconds. Check the amount of product collected in the calibration cup.
- 5. Raise the lance tip above head level and depress the trigger long enough to allow product to flow back into the lance.
- 6. Repeat until the correct volume is obtained.

<sup>\*\*\*</sup> Increase the rate within the recommended range as height and density of the vegetation increase. Use the higher number for tough-to-control weeds.

<sup>&</sup>quot;Multi Flow is a trademark of Nomix Manufacturing Company Limited of the United Kingdom used under exclusive license by Monsanto Company.

#### WHEN TO APPLY

Apply to vigorously growing plants. Apply to undesirable grasses and broadleaf weeds any time after emergence and when sufficient foliage is present for good spray interception. After mowing, clipping or tilling, allow weeds to regrow before applying this product.

Rainfall or watering within 6 hours after application may wash the product off plant foliage resulting in reduced activity and the need for retreatment. Delay mowing, clipping, tilling, planting or sodding of treated areas for at least 7 days after application. This allows time for this product to move within the plant for the most effective kill. THIS PRODUCT HAS NO SOIL RESIDUAL ACTIVITY. RETREATMENTS WILL BE NECESSARY TO KILL NEW WEEDS EMERGING FROM SEED.

One application will control or suppress weeds listed in the "WEEDS CONTROLLED" section of this label. If control is not ac ieved within 4 weeks, allow time for sufficient regrowth of the vegetaion and make a repeat application.

#### ORNAMENTALS AND PLANT BEDS

Ornamentals, flowers and other plants used for landscaping may be planted in treated areas 7 or more days after application. This product may also be used as a directed application to control undesirable vegetation growing around ornamentals, trees or shrubs. Avoid spray contact with any desirable plants. To avoid injury on desirable plants, prevent spray or drift contact with foliage, stems or bark. DO NOT SPRAY INTO OR OVER THE TOP OF DESIRABLE PLANTS, TREES OR SHRUBS.

#### GREENHOUSE/SHADEHOUSE

This product will control or suppress grasses and broadleaf weeds listed on this label which are growing in greenhouses. Removal of desirable vegetation during application is recommended to avoid injury. Air circulation fans must be turned off during application. DESIRABLE GREENHOUSE PLANTS WILL BE INJURED IF CONTACTED BY SPRAY OR DRIFT OF THIS PRODUCT.

#### CLEANING OF EQUIPMENT

The Expedite application equipment must be cleaned after each use and prior to storage using Expedite cleaner to remove residues of this product. Failure to properly clean the equipment may result in equipment failure or injury to subsequently treated desirable vegetation. After 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.

#### 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 products 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.

A-200.28/53

EPA Reg. No. 524-432

#### OMONSANTO 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.