JAN 30 1995

Mr. Victor A. Dorr Agrevo USA Company Little Falls Centre One 2711 Centerville Road wilmington, DE 19808

Dear Mr. Dorr:

Subject: Dakota* Herbicide

EFA Req. No. 45639-190

Application Dates January 18, 1995, Request To Amend Registration To Amena Registration To Revise Use Directions for Use in Culture of

Durum wheat

The proposed labeling anonoments to revise the usepattern for use or bakota Herbicide in the culture of durum wheat has been reviewed and is acceptable under the Federal Insecticide, Eunglicide and Rodenticide Act as amended, provided that you:

o submit one (1) copy of the final printed label before releasing the product for shipment under the the subject labeling.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA, Section (e). Your release for shipment of the product constitutes acceptance of this condition.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

Joanne I. Miller Product Manager (23) Fungicide-Herbicide Pranch Registration Division (7505C)

inclosures (1)

E.milson:Diskette #10001a:01-30-95

BEST AVAILABLE COPY

Revised: December 23, 1994 (Edition #3)

DAKOTA® HERBICIDE

FOR POSTEMERGENCE CONTROL OF GREEN FOXTAIL AND BROADLEAF WEEDS IN SPRING, WINTER AND DURUM WHEAT

ACTIVE INGREDIENTS:

fenoxaprop-p-ethyl: (+)-ethyl 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy] propanoate***..2.64%*

MCPA isoocytyl ester: isooctylester of 2-methyl-4- chlorophenoxyacetic..................50.06%**

(Equivalent to 32.10% of pure 2-methyl-4-chlorophenoxyacetic acid)

TOTAL: 100.00%

KEEP OUT OF REACH OF CHILDREN.

WARNING AVISO

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

EPA REG. NO. 45639-190

NET CONTENTS:

EPA EST. NO. 8340-CN-01

ACCUPATED WITH CONTROL BATE

JAN 30 1995

****U.S. Patent Nos. 4,130,413 & 5,254,527

Under the Pederal Insecricide, Fungioide, and Rodenticide Act as amended, for the posticula registered under EPA Reg. No. 45639-190



A company of Hoechst and NOR-AM

AgrEvo™ USA Company
Little Falls Centre One
2711 Centerville Road
Wilmington, DE 19808

^{*} Equivalent to 0.234 pound of pure fenoxaprop-p-ethyl (d isomer) per gallon

^{**} Equivalent to 2.84 pounds of pure 2-methyl-4-chlorophenoxyacetic acid per gallon

STATEMENT OF PRACTICAL TREATMENT

)

)

If Swallowed: Do not induce vomiting. Contains petroleum distillates. Call a physician. Gastric lavage should be supervised by trained personnel because of the possible pulmonary damage via aspiration of the solvent. If possible, bring the container and labeling to attending physician.

If in Eyes: Flush eyes with plenty of water for 15 minutes. Get medical attention immediately.

If on skin: Wash with plenty of soap and water. Get medical attention if skin irritation develops and persists.

If Inhaled: Remove victim to fresh air. Apply artificial respiration if necessary.

IN CASE OF MEDICAL EMERGENCIES OR HEALTH AND SAFETY INQUIRIES, OR IN CASE OF FIRE, LEAKING OR DAMAGED CONTAINERS, INFORMATION MAY BE OBTAINED BY CALLING: 800-228-5635, EXT. 202

PRECAUTIONARY STATEMENTS

WARNING

)

)

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing.

Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

Long-sleeved shirt and long pants; chemical-resistant gloves, such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, or viton ≥14 mils; shoes plus socks; protective eyewear.

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, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering control 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.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gioves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates or nontarget plants. Do not apply directly to water, 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 washwaters or rinsate.

GROUNDWATER CONTAMINATION

Most cases of groundwater contamination involving phenoxy herbicides such as MCPA have been associated with mixing/loading and disposal sites. Caution should be exercised when handling MCPA pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

CLEANING OF EQUIPMENT

)

)

When cleaning equipment, do not pour the washwater on the ground; spray or drain over a large area away from wells or other water sources.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Keep container tightly closed when not in use. Avoid cross-contamination with other pesticides. Do not store over 100°F or below 10°F. Do not use or store near heat or open flame.

<u>PESTICIDE DISPOSAL</u>: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the hazardous waste representative at the nearest EPA Regional Office for guidance.

<u>CONTAINER DISPOSAL</u>: Empty containers should be triple rinsed into the spray tank during the spray operation. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT: READ BEFORE USE

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, because of extreme weather conditions and soil conditions, manner of use and other factors beyond AgrEvo USA Company's control, it is impossible for AgrEvo USA Company to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of AgrEvo USA Company is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. AgrEvo USA Company disclaims any liability whatsoever for incidental or consequential damages, including, but not limited to, liability arising out of breach of contract, express or implied warranty (including warranties of merchantability and fitness for a particular purpose), tort, negligence, strict liability or otherwise.

LIMITATIONS OF LIABILITY: 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 AGREVO USA COMPANY'S ELECTION, THE REPLACEMENT OF PRODUCT.

©AGREVO USA COMPANY, 1993

)

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 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 intervals. 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 24 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, such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils or viton ≥14 mils; shoes plus socks; protective eyewear.

GENERAL INFORMATION

Dakota Herbicide is a postemergence herbicide for the control of green foxtail (pigeongrass) and certain broadleaf weeds in spring, winter and durum wheat.

When Dakota Herbicide is used on durum wheat, it <u>MUST</u> be tank mixed with Express 75DF Herbicide to enhance crop safety. <u>Dakota Herbicide may cause yellowing, stunting and delayed maturity when applied to durum wheat.</u>

<u>INFORMATION ON HERBICIDE RESISTANT WEEDS</u>

Repeated use of the same herbicide or related herbicides may result in rare, naturally resistant weeds multiplying to economic infestations. In areas with consistent use of the same herbicide or herbicide mode of action, crop rotation and application of alternative mode of action herbicides are encouraged to prevent and/or reduce weed resistance. For further information, contact an AgrEvo USA Company representative or your local state extension service.

APPLICATION DIRECTIONS

)

)

Dakota Herbicide controls annual grassy and broadleaf weeds listed in the following table.

Ground Application: Do not apply when winds are gusty, or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Dakota Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. Apply a minimum of 5 gallons of spray solution per acre for use on spring and winter wheat and 10 gallons of spray solution for use on durum wheat and use a spray pressure of 30-40 psi with flat fan nozzle tips. Ground speed for application should not exceed 10 mph. Do not apply with hollow cone type insecticide or other nozzles that produce a fine droplet spray. Under dense weed/crop canopies or adverse growing conditions, high spray volume (15-20 gpa) and higher Dakota Herbicide rates (only for use on spring and winter wheat) are required for best weed control.

Aerial Application: Calibrate the spray equipment prior to use. Dakota Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray cove age, use nozzles to provide 200-350 micron size druplets. DO NOT use raindrop nozzles. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi and wind speed not exceeding 10 mph to assure accurate application within the target area. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

PRECAUTIONS TO BE TAKEN TO AVOID SPRAY DRIFT

•)

)

Do not allow spray from aerial equipment to drift onto adjacent land or crops. When drift may be a problem, do everything possible to reduce spray drift, including the following:

- Do not spray if wind speeds are or become excessive. Do not spray if the wind is 10 mph or greater. If sensitive crops or plants are downwind, extreme caution must be used under all conditions. Do not spray if winds are gusty.
- Use extreme caution when conditions are favorable for drift (high temperatures, drought, low relative humidity), especially when sensitive crops are located nearby.
- Drift from aerial applications of the herbicide is likely to result in damage to sensitive plants adjacent to the treatment site. This damage can occur at levels below the concentrations which can be detected with chemical analysis.
- Do not apply when a temperature inversion exists. If inversion conditions are suspected, consult with local weather services before making an application.
- Use the lowest number of nozzles practical with the largest possible orifice size within the specified range to obtain the minimum 5 gallon per acre spray volume. Application height and boom length should be set according to manufacturer's instructions to minimize drift.
- Reduce the volume of spray mixture by using higher flow rate nozzles. Using lower pressure with the appropriate nozzle to obtain higher volumes will also reduce spray drift.
- Apply as close to target plants as practical while maintaining a good spray pattern for adequate coverage.



RATE RECOMMENDATION CHART Rates in Fl.Oz./Acre			
Grass Species	Spring & Winter Wheat	Durum Wheat*	
Green Foxtail			
Foxtail Millets (volunteer)	16.0	18.0	
Common, Siberian			
Hungarian, German Millet			
Broadleaf Weeds			
Annual Sowthistle			
Common Lambsquarters	1		
Field Pennycress			
Pigweed (suppression)	1		
Purslane	16.0	18.0	
Ragweed			
Shepherdspurse	1		
Tumble (Jim Hill) Mustard			
Wild Mustard			
Wild Radish	1		

^{*} For use on durum wheat, Dakota Herbicide <u>MUST</u> be tank mixed with Express 75DF Herbicide at 1/6 ounce of product per acre. Refer to the Express 75DF Herbicide product label for all use and precautionary statements

Dakota Herbicide contains the herbicide MCPA as one of the active ingredients. Equipment used in applying MCPA phenoxy herbicide requires special cleaning if it is used for applying non-phenoxy herbicides. Failure to properly clean your equipment could result in undesirable growth effects or injury to sequentially sprayed plants. Use repeated flushings with soap and warm water or suitable chemical cleaner.

TIMING OF APPLICATION

)

1

Spring and Winter Wheat: Apply Dakota Herbicide to spring wheat from the 3 leaf stage to the end of tillering (6 leaf) stage of growth. Winter wheat should have a minimum of three tillers before application. DO NOT spray spring or winter wheat after jointing begins.

Durum Wheat: Apply Dakota Herbicide to durum wheat from the 3 leaf stage to the 5 leaf stage of growth. DO NOT spray durum wheat if the 6th leaf is visible.

Weeds: Dakota Herbicide will control susceptible grassy weeds in the 2-leaf to 2-tiller stage of growth. Annual broadleaf weeds must not exceed 4 inches in height. Application should be made to young, actively growing weeds. Dakota Herbicide controls emerged grassy and broadleaf weeds.

OPTIMUM CONDITIONS FOR GREEN FOXTAIL CONTROL

Green foxtail (pigeongrass) is controlled over a wide range of soil moisture conditions. However, foxtail showing drought stress and exhibiting rolled leaves ("onion leaf") should not be sprayed as poor control may result.

MIXING INSTRUCTIONS FOR USE ON WINTER & SPRING WHEAT

- 1. Assure the spray tank is thoroughly clean.
- 2. Fill the spray tank with one-half of the total amount of clean water required for the application and start the agitation or by-pass system.
- 3. Add the recommended amount of Dakota Herbicide and continue agitation.
- 4. Triple rinse the emptied container into the spray tank.
- 5. Add the remaining amount of water while agitation continues. Spray immediately.

MIXING INSTRUCTIONS FOR USE ON DURUM WHEAT

1. Assure the spray tank is thoroughly clean.

)

)

- 2. Fill the spray tank with one-half of the total amount of clean water required for the application and start the agitation or by-pass system.
- 3. ALWAYS first add the recommended amount of Express 75DF Herbicide into 3 to 4 gallons of clean water in a separate container and mix until the Express 75DF Herbicide is fully suspended. ALWAYS use a clean container to mix the preslurry of Express 75DF Herbicide with water to ensure complete suspension.
- 4. Add the suspension of Express 75DF Herbicide to the partially filled spray tank. Agitate thoroughly until all of the suspension is completely mixed.
- 5. Add the recommended amount of Dakota Herbicide and continue agitation.
- 6. Triple rinse the empty containers into the spray tank.
- 7. Add the remaining amount of water while agitation continues. Spray immediately. Spray mixture should not be left in spray tank overnight.

TANK MIX COMBINATIONS (For Spring & Winter Wheat Only)

Broadleaf Herbicides

Dakota Herbicide may be tank mixed with one of the listed herbicides for broader spectrum weed control in wheat. Refer to the following chart for the approved broadleaf tank mix partners and the correct rates of application for Dakota Herbicide.

	TANK MIX RECOMMENDATION CHART				
Dakota	Tank Mix Partner ¹				
Herbicide	Product	Formulation	Rate		
	Banvel® Herbicide	4.0 lbs/gal	2.0 fl oz/A		
16.0 fl oz/A	Banvel SGF® Herbicide	2.0 lbs/gal	4.0 fl oz/A		
	Tordon® Herbicide	22K	1.5 fl oz/A		
	Ally® Herbicide 2	60DF	1/10 oz/A		
	Amber® Herbicide	75 DF	0.28 oz/A		
	Buctril® Herbicide 3	2EC	12.0-16.0		
	<u> </u>		fl oz/A		
21.3 fl oz/A	Buctril® Gel Herbicide 3	Gel	3-4 packs/20 A		
	Express® Herbicide	75DF	1/6 oz/A		
	Harmony® Extra Herbicide	75DF	3/10 oz/A		
	Stinger® Herbicide	3.0 lbs/gal	5.3 fl oz/A		

- No more than one tank mix partner can be mixed with Dakota Herbicide.
- The addition of Ally Herbicide may slow or reduce activity of Dakota Herbicide on green foxtail or foxtail millets.
- The addition of Buctril 2EC or Buctril Gel Herbicide to Dakota Herbicide may cause temporary yellowing and/or height reduction to the wheat.

Refer to these specific product labels for all use and precautionary statements.

Insecticides

Dakota Herbicide may be tank mixed with either Furadan® 4 F or Sevin® XLR PLUS insecticides if tuning for insect and weed control are proper.

Fungicides

Mancozeb can be tank mixed with Dakota Herbicide when application timing is correct for both products.

SPRAYER CLEANOUT AFTER USE WITH TANK MIXES

Refer to tank mix partner label for specific sprayer cleanout requirements after tank mix use. This is particularly important when tank mixing with sulfonylurea herbicides.

SPECIAL NOTES

- 1. DO NOT apply to rye, oats or corn.
- 2. Rainfall within 1 hour after an application may cause a reduction in weed control.
- 3. DO NOT apply more than 1 application in a growing season.
- 4. DO NOT apply Dakota Herbicide within 60 days of harvesting wheat in the states of Minnesota, Montana, North Dakota and South Dakota. DO NOT apply Dakota Herbicide within 70 days of harvest in all other states.
- 5. DO NOT apply this product through any type of irrigation system.
- 6. DO NOT tank mix Dakota Herbicide with other herbicides, surfactants, or liquid fertilizers unless specifically recommended on this label.
- 7. Dakota Herbicide contains the active ingredients fenoxaprop-p-ethyl and MCPA ester. Do not use when there is hazard from drifting mists. (Coarse sprays are less likely to drift.) Vapors from this product may injure susceptible plants in the immediate vicinity.
- 8. Cool, wet conditions at the time of application may result in temporary stunting or chlorosis of the wheat.
- 9. DO NOT apply any pesticides other than those listed on this label within 5 days of a Dakota Herbicide application or reduced grassy weed control may occur.

Trademark Information

)

Banvel and Banvel SGF are registered trademarks of Sandoz Crop Protection Corporation.

Ally, Harmony Extra and Express are registered trademarks of E.I. duPont de Nemours & Co., Inc.

Buctril and Sevin XLR PLUS are registered trademarks of Rhone-Poulenc Ag Company.

Tordon and Stinger are registered trademarks of DowElanco.

Amber is a registered trademark of CIBA-GEIGY Corporation.

Furadan 4 F is a registered trademark of FMC Corporation.

)

Ì

File: c:\msoffice\winword\vaddoc94\1122941.DOC December 23, 1994

File: File: Date: D Edition No. 3