

PM 23

8340-44

File  
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

MAR 3 1994

Diane L. Rosi  
HOECHST CELANESE CORP.  
C/O V A DOOR  
RT 202-206 BOX 2500  
SOMERSVILLE, NJ 08876

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 08/09/93 in Response to PR Notice 93-7  
EPA Reg. No. 8340-44  
CHEYENNE FM HERBICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

**WHAT THIS ACCEPTANCE MEANS:**

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

**WHAT YOU NEED TO DO NEXT:**

Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

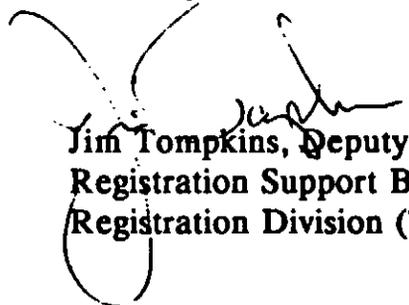
**Submit the final printed labeling via the U.S. Postal Service to:**

**Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001**

**Hand or courier deliveries of final printed labeling may be made to:**

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

**Sincerely,**



**Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)**

**Attachment**

3 7 14

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division

Diane L Rosi  
HOECHST CELANESE CORP  
C/O V A DOOR  
RT 202-206 BOX 2500  
SOMERVILLE NJ 08876

Comment for: EPA Reg Nr.8340-44  
CHEYENNE FM HERBICIDE

The following specific comments pertain to your WPS  
labeling submission concerning the product  
cited above:

No comment.

~~Revised: November 24, 1992~~  
Revised: July 8, 1993

# CHEYENNE® FM HERBICIDE

**FOR POSTEMERGENCE CONTROL OF MOST ANNUAL GRASSY WEEDS (INCLUDING WILD OATS AND FOXTAIL SPECIES) AND BROADLEAF WEEDS IN WHEAT**

**ACTIVE INGREDIENTS:**

fenoxaprop-ethyl: (±)-ethyl 2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy] propanoate .....6.03%\*

MCPA Isooctyl Ester: Isooctylester of 2-methyl-4-chlorophenoxyacetic acid .....38.14%\*\*

(Equivalent to 24.46% of pure 2-methyl-4-chlorophenoxyacetic acid equivalent)

**INERT INGREDIENTS:** .....55.83%

**TOTAL:** 100.00%

\*Equivalent to 0.53 pound of pure fenoxaprop-ethyl per gallon  
 \*\*Equivalent to 2.16 pounds of pure 2-methyl-4-chlorophenoxyacetic acid per gallon

**KEEP OUT OF REACH OF CHILDREN.**

## DANGER PELIGRO

**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.)**

**SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.**

**SEE ATTACHED FOLDER FOR COMPLETE DIRECTIONS OF USE AND ADDITIONAL INFORMATION.**

EPA REG. NO. 8340-44

EPA EST. NO. 8340-CN-01

**NET CONTENTS:**

**HOECHST CELANESE CORPORATION**  
 Route 202-206  
 P.O. Box 2500  
 Somerville, NJ 08876-1258

**BEST AVAILABLE COPY**

ACCEPTED  
 with COMMENTS  
 In EPA Letter Dated  
 MAR 3 1994



Under the Federal Insecticide,  
 Fungicide, and Rodenticide Act  
 as amended, for the pesticide  
 registered under EPA Reg. No.  
8340-44

**PRECAUTIONARY STATEMENTS**

**DANGER**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

Corrosive. Causes irreversible eye damage. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes or on skin and clothing. Avoid breathing spray mist. ~~Wear eye goggles, face shield or safety glasses and gloves when mixing and loading. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.~~

**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 2-14 mils, nitrile rubber 2-14 mils, or viton 2-14 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 gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**BEST AVAILABLE COPY**

**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.

**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.

**EMERGENCY PHONE NUMBER**

For Human, Fire, Spill or Environmental Emergency:

call *1-800-228-5635, Extension 132*

**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.

**PESTICIDE DISPOSAL:** 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.

**CONTAINER DISPOSAL:** 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 NOTICE: DISCLAIMER**

Read "IMPORTANT NOTICE: DISCLAIMER" before buying or using. If terms are not acceptable, return at once unopened.

The directions for use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

HOECHST CELANESE CORPORATION warrants only that the product conforms to the chemical description on the label and is reasonably fit for the purpose stated on the label when used in accordance with the directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable to HOECHST CELANESE CORPORATION and user assumes the risk of any such use. HOECHST CELANESE CORPORATION MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY. In no case shall HOECHST CELANESE CORPORATION be liable for consequential, special, indirect or incidental damages resulting from the use or handling of this product. The foregoing conditions of sale and warranty can be varied only by an agreement in writing signed by a duly authorized representative of HOECHST CELANESE CORPORATION.

**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 214 mils, nitrile rubber 214 mils or viton 2 14 mils; shoes plus socks; protective eyewear

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## GENERAL INFORMATION

Cheyenne® FM Herbicide is a broad-spectrum postemergence herbicide for the control of both grass and broadleaf weeds in wheat. Grass weeds controlled include wild oats, green foxtail (pigeongrass), volunteer and wild millet species. In addition, several broadleaf weeds are controlled including kochia, redroot pigweed, wild mustard, and common lambsquarters.

DO NOT apply to barley.

## APPLICATION DIRECTIONS

Cheyenne® FM Herbicide controls annual grassy and broadleaf weeds with one rate of application.

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 Cheyenne® FM Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. Apply a minimum of 10 gallons of spray solution per acre, using 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 nozzles or other nozzles that produce a fine droplet spray. Under dense weed populations, high spray volume (15-20 gpa) is required for obtaining thorough coverage.

Aerial Application: Calibrate the spray equipment prior to use. Cheyenne® FM Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray coverage, use nozzles to provide 200-350 micron size droplets. 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.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin. ~~and should wash thoroughly before eating and at the end of each day's operation.~~

Follow up

**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		
Grass Species	Fl.Oz./Acre	Pts/A
<b>Barnyardgrass</b> <b>Foxtail Millets (volunteer)</b> Common, Siberian, Hungarian, German <b>Green Foxtail</b> <b>Proso Millet</b> <b>Wild Oats</b> <b>Yellow Foxtail*</b> <b>Volunteer Corn</b>	22.4	1.4
<b>Broadleaf Weeds</b>  <b>Annual Sowthistle</b> <b>Black Mustard</b> <b>Blue/Purple mustard</b> <b>Canada Thistle</b> <b>Common Chickweed</b> <b>Common Cocklebur</b> <b>Common Groundsel</b> <b>Common Lambsquarters</b> <b>Curly Dock</b> <b>False Chamomile</b> <b>Field Pennycress</b> <b>Flixweed</b> <b>Green Smartweed</b> <b>Kochia</b> <b>Ladysthumb</b> <b>London Rocket</b> <b>Marshelder</b> <b>Miners Lettuce</b> <b>Pennsylvania Smartweed</b> <b>Prickly Lettuce</b> <b>Prostrate Knotweed</b> <b>Redroot Pigweed</b> <b>Russian Thistle</b> <b>Scentless Mayweed</b> <b>Shepherdspurse</b> <b>Smallflower Buttercup</b> <b>Stinking Mayweed/Dogfennel</b> <b>Tansey mustard</b> <b>Tarweed Fiddleneck</b> <b>Treacle Mustard</b> <b>Tumble Mustard</b> <b>Volunteer Lentils</b> <b>Volunteer Peas</b> <b>Volunteer Sunflower</b> <b>Wild Buckwheat*</b> <b>Wild Chamomile</b> <b>Wild Garlic</b> <b>Wild Mustard</b>	22.4	1.4

\* Suppression only

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. See Sprayer Cleanup section of this labeling for further information.

#### **TIMING OF APPLICATION**

**Crops:** The time of application is determined by the growth stage of the wheat and the grassy weed species. Apply Cheyenne® FM 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 3 tillers before application. **DO NOT spray spring or winter wheat after jointing begins.**

**Weeds:** Cheyenne® FM Herbicide will control wild oats in the 1-4 leaf stage of growth and green foxtail in the 2-leaf to 2-tiller stage of growth. Annual broadleaf weeds should have grown beyond the cotyledon stage but less than 4 inches tall or in diameter. Applications should be made to young, actively growing weeds.

Cheyenne® FM Herbicide has no effect via the soil and will only control emerged grassy and broadleaf weeds.

#### **OPTIMUM CONDITIONS FOR WILD OAT CONTROL**

The following conditions will result in optimum wild oat control:

- a. adequate soil moisture which occurs under normal rainfall or in soil following a fallow year
- b. temperatures generally lower than 85°F for several days prior to application

Low soil moisture levels, low humidity, and high temperatures will interact to reduce the wild oat control by Cheyenne® FM Herbicide.

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**

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 bypass system.
3. Add the recommended amount of Cheyenne® FM 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. Spray mixture should not be left in spray tank overnight.

**TANK MIX COMBINATIONS**

Cheyenne® FM Herbicide may be tank mixed with Harmony® Extra 75DF Herbicide for broader spectrum weed control in spring wheat and winter wheat. Harmony Extra 75DF Herbicide should be tank mixed at a rate of 0.3 ounces per acre with Cheyenne® FM Herbicide at 22 fluid ounces per acre.

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

**USE PRECAUTIONS FOR CHEYENNE® FM HERBICIDE**

1. DO NOT apply to the following crops: barley, corn, rye, or oats.
2. Rainfall within 4 hours 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 Cheyenne® FM Herbicide within 70 days of harvesting wheat.
5. DO NOT apply this product through any type of irrigation system.
6. DO NOT tank mix Cheyenne® FM Herbicide with other pesticides, surfactants, or liquid fertilizers unless recommended on this label.

7. Cheyenne® FM Herbicide contains the herbicides fenoxaprop-ethyl and MCPA ester as active ingredients. 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, such as sugarbeets and potatoes.
8. Cool, wet conditions at the time of application may result in temporary height reduction or yellowing of the wheat.
9. DO NOT plant any crop other than wheat or barley for 60 days after application of Cheyenne® FM Herbicide.
10. DO NOT graze or feed forage or hay from treated areas to livestock (harvested straw may be used for bedding and/or feed).
11. DO NOT apply to wheat that is stressed by severe winter, drought, water-saturated soil, disease and insect damage as crop injury may result. Under certain conditions such as prolonged cool weather (daily high temperature less than 50°F) or wide fluctuations in day/night temperatures just prior to, during or soon after treatment, temporary yellowing and/or crop stunting may occur. Risk of injury is greatest when wheat plants are in the 2-leaf to 5-leaf stage when above conditions exist.
12. Naturally-occurring weed biotypes that are resistant to duPont Harmony<sup>R</sup> Extra Herbicide will also be resistant to X-TRA Herbicide.
13. Under certain conditions (drought stress, crop in 2-4 leaf stage), sequential applications of organophosphate insecticides (parathion) may produce temporary crop yellowing or, in severe cases, crop injury.

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Trademark Information  
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Harmony Extra 75DF Herbicide is a registered trademark of E.I. duPont de Nemours & Co., Inc.