

PM23

8340-44

1 of 12

15 JAN 1993

Mr. Victor A. Dorr
Hoechst Celanese Corporation
Route 202-205, P.O. Box 2500
Somerville, NJ 08876-1258

Dear Mr. Dorr:

Subject: Cheyene® PM Herbicide
EPA Registration No. 8340-44
Application Dated December 16, 1992, Request To
Amend Registration To Permit Twin-Pack Packaging
with Harmony Extra Herbicide (EPA Reg. No. 352-538)
for Application as a Tank Mix and Your Letter
Dated January 14, 1992, Submission of Revised Labeling

The proposed amendment reflected in the labeling submitted has been reviewed and is acceptable for registration under Section 3 of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended provided that you:

1. Submit required data as described as required for conditional registration of the subject product on November 16, 1992.
2. Revise the "Mixing Instructions" 3 and 4 (page 8) by changing the word "dissolved" to "fully suspended". We have determined that Harmony Extra Herbicide would only form a fine suspension when added to water. The word dissolve is not correctly used in this description.
3. Submit five (5) printed copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA, section 6(e). Your release for shipment of this product constitutes acceptance of these conditions.

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

Sincerely yours,

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

Enclosure

E.Wilson:Diskette #ABC5:01-14-93

BEST AVAILABLE COPY

Revised: January 12, 1993

CHEYENNE™ HERBICIDE

A TWIN PACK PRODUCT FOR POSTEMERGENCE CONTROL OF MOST ANNUAL GRASSY WEEDS (INCLUDING WILD OATS AND FOXTAIL SPECIES) AND BROADLEAF WEEDS IN WHEAT (EXCLUDING DURUM WHEAT)

CHEYENNE™ FM HERBICIDE

EPA REG. NO. 8340-44

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 pounds 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

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

NET CONTENTS: 7.0 GALLONS

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

X-TRA HERBICIDE

EPA REG. NO. 352-538-54382

ACTIVE INGREDIENT:

methyl-3-[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino]sulfonyl]-2-thiophenecarboxylate..... 50.00%

methyl-2-[[[N-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)methylamino]carbonyl]amino]sulfonyl]benzoate..... 25.00%

INERT INGREDIENTS:..... 25.00%

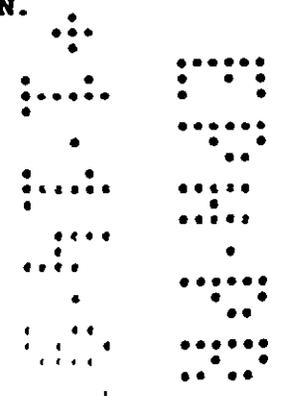
TOTAL: 100.00%

APPROXIMATE
INERT INGREDIENTS
15 JAN 1993

8340-44

KEEP OUT OF REACH OF CHILDREN.

CAUTION



NET CONTENTS: 0.750 POUND

Hoechst

BEST AVAILABLE COPY

CHEYENNE™ FM HERBICIDE

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.

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

X-TRA HERBICIDE

PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION! Avoid contact with the skin, eyes, and clothing. In case of contact with the eyes, immediately flush with plenty of water. Get medical attention if irritation persists. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

For medical emergencies involving this product, call toll free 1-800-441-3637.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands (swamps, bogs, marshes and potholes). Do not contaminate water when disposing of equipment washwaters. In case of significant spill, call CHEMTREC at 1-800-424-9300.

STORAGE AND DISPOSAL:

<u>CHEYENNE™ FM HERBICIDE</u>	<u>X-TRA HERBICIDE</u>
<p><u>STORAGE:</u> 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.</p> <p>Do not store over 100° F or below 10 F. Do not use or store near heat or open flame.</p> <p><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.</p> <p><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.</p>	<p><u>STORAGE:</u> Store product in original container only, away from other pesticides, fertilizer, food or feed.</p> <p><u>PRODUCT DISPOSAL:</u> Do not contaminate water, food or feed by storage or disposal. Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.</p> <p><u>CONTAINER DISPOSAL:</u> Triple-rinse (or equivalent). 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. In case of significant spill, call CHEMTREC 1-800-424-9300.</p>

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

GENERAL INFORMATION

Cheyenne™ Herbicide is a broad-spectrum postemergence herbicide for the control of both grass and broadleaf weeds in wheat (excluding durum 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.

This twin pack of Cheyenne™ Herbicide contains 3.5 gallons of Cheyenne™ FM Herbicide (marked container number 2) and 0.375 pound of X-TRA Herbicide (marked container number 1). All of the components in the Cheyenne™ Herbicide package **MUST** be tank mixed according to the mixing instructions in this label and applied according to the recommendations given in the following Application Directions section, or a reduction in weed control and/or a potential for crop injury will occur.

DO NOT apply to barley or durum wheat.

APPLICATION DIRECTIONS

Cheyenne™ Herbicide controls annual grassy and broadleaf weeds with one rate of application. One box of Cheyenne™ Herbicide will treat 40 acres of wheat. One box of Cheyenne™ Herbicide contains two 20 acre units. Each unit consists of one container of Cheyenne® FM and one container of X-TRA Herbicide. The Cheyenne FM Herbicide must always be tank mixed with the X-TRA Herbicide prior to use to insure crop safety and adequate weed control.

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.



RATE RECOMMENDATION CHART

Grass Species	CHEYENNE™ FM HERBICIDE RATE		X-TRA RATE
	Fl.Oz./Acre	Pts/A	Oz./Acre
Barnyardgrass Foxtail Millets (volunteer) Common, Siberian, Hungarian, German Green Foxtail Proso Millet Wild Oats Yellow Foxtail* Volunteer Corn	22.4	1.4	0.3
Broadleaf Weeds			
Annual Sowthistle Black Mustard Blue/Purple mustard Canada Thistle* Common Chickweed Common Cocklebur Common Groundsel Common Lambsquarters Curly Dock False Chamomile Field Pennycress Flixweed Green Smartweed Kochia Ladysthumb London Rocket Marshelder Miners Lettuce Pennsylvania Smartweed Prickly Lettuce Prostrate Knotweed Redroot Pigweed Russian Thistle Scentless Mayweed Shepherdspurse Smallflower Buttercup Stinking Mayweed/Dogfennel Tanseymustard Tarweed Fiddleneck Treacle Mustard Tumble Mustard Volunteer Lentils Volunteer Peas Volunteer Sunflower Wild Buckwheat* Wild Chamomile Wild Garlic Wild Mustard	22.4	1.4	0.3

* 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™ 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™ 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™ Herbicide will only control emerged grassy and broadleaf weeds.

OPTIMUM CONDITIONS FOR WILD OAT CONTROL

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

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

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 by-pass system.
3. ALWAYS first add the recommended amount of X-TRA Herbicide (container #1), into 3 to 4 gallons of clean water in a separate container and mix until the X-TRA Herbicide is dissolved. Then add this suspension to the partially filled spray tank. ALWAYS use a clean container to mix the preslurry of X-TRA Herbicide with water to ensure complete solubility.
4. Add the dissolved X-TRA Herbicide to the spray tank. Agitate thoroughly until all of the mixture is completely in suspension.
5. Add the recommended amount of Cheyenne™ FM Herbicide (container #2) and continue agitation.
6. Triple rinse the emptied containers, numbers 1 and 2, 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.

SPRAYER CLEANUP

To avoid subsequent injury to crops other than wheat, thoroughly clean all mixing, loading and spray equipment immediately following applications of Cheyenne™ Herbicide as follows:

1. Drain tank; thoroughly rinse spray tanks, boom and hoses with clean water. Loosen and physically remove any visible deposits.
2. Fill the tank with clean water and 1 gallon of household ammonia* (contains 3% active) for every 100 gallons of water. Flush hoses, indicators, boom and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 minutes. Again flush the hoses, boom and nozzles with the cleaning solution and then drain the tank.

- 3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
- 4. Repeat Step 2.
- 5. Rinse the tank, boom and hoses with clean water.
- 6. The rinsate may be disposed of on site or at an approved waste disposal facility.

*Equivalent amounts of ammonia or an approved cleaner (listed below) can be used in the clean out procedure. Carefully read and follow the individual cleaner instructions.

Approved Cleaners

- * Protank Cleaner - Manufactured for Cenex/Land O'Lakes Agronomy Co.
- * Chem-Tank Cleaner & Neutralizer - Manufactured by Farmbelt Chemicals, Inc.
- * "Incide-Out"
- * Nutra-Sol - Compounded for Thomas G. Kilfoil Co., Inc., San Bruno, CA.
- * Tank and Equipment Cleaner - Manufactured by Loveland Industries, Inc.
- * Tank-Aid - Manufactured for Cornbelt Chemical Company

Notes

- 1. Where routine spraying practices include shared equipment frequently being switched between applications of X-TRA and applications to sensitive crops during the same spray season, it is recommended a sprayer be dedicated to X-TRA to further reduce the chance for injury to sensitive crops.
- 2. DO NOT use chlorine bleach with ammonia. Mixing of these materials will release a gas with a musty chlorine odor which can cause eye, nose, throat and lung irritation. DO NOT clean equipment in an enclosed area.

USE PRECAUTIONS FOR CHEYENNE™ 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™ 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™ Herbicide with other pesticides, surfactants, or liquid fertilizers.
7. Cheyenne™ Herbicide contains the herbicides fenoxaprop-ethyl, thifensulfuron, tribenuron methyl 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™ 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°C), 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® 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.

120712

Trademark Information

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

File: f:\group\regscilvad1219.924
Date: January 12, 1993
Edition No : 3

)

)

