



Reg # 10163-200 PM-25
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176

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

MAY 06 1994

Bethany G. Hulcy
GOWAN CO.
BOX 5569
YUMA, AZ 85366

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 09/05/93 in Response to PR Notice 93-7
EPA Reg. No. 10163-200
PREFAR 4-E

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 subject to the comments reflected on the enclosed sheet. 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:

By the next label printing make all the specified changes to your labeling. 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

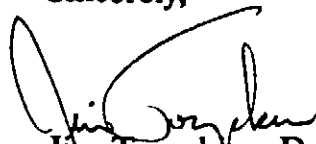
Submit the final printed labeling via the U.S. Postal Service to:

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

GOWAN CO.
10163-200 09/05/93
PREFAR 4-E
Original Submission

Delete the crossed-out statements on your proposed label. They are redundant statements or phrases.

Prefar 4-E

Selective Herbicide

Emulsifiable Liquid for control of Annual Grasses and Broadleaf Weeds

Active Ingredient: Bensulide
S-(O,O-diisopropyl phosphorodithioate) ester of N-(2-mercaptoethyl) benzenesulfonamide
Inert Ingredients:

% By Wt.
46.0%
54.0%
TOTAL 100.0%

Contains 4 pounds of active ingredient per gallon

KEEP OUT OF REACH OF CHILDREN
CAUTION

STATEMENT OF PRACTICAL TREATMENT
Organophosphate Pesticide

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

MAY 06 1994

10163-200

FIRST AID: If a known exposure occurs or is suspected, immediately start the procedures given below and simultaneously contact a Poison Center, a physician, or the nearest hospital.

NOTE: Be sure to advise the person contacted that the active ingredient in this compound is a cholinesterase inhibitor. Describe the type of exposure, the victim's symptoms, and follow the advice given.

NOTE TO MEDICAL PERSONNEL: Should cholinesterase inhibition occur, atropine by injection is antidotal. 2-PAM (Protopam Chloride) is also antidotal when administered early and in conjunction with atropine.

IF SWALLOWED, immediately give several glasses of water but do not induce vomiting. If vomiting does occur, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

FOR SKIN CONTACT, flush all affected areas with plenty of water for several minutes. Remove and clean contaminated clothing and shoes. Seek medical attention if irritation occurs.

FOR EYE CONTACT, flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

IF INHALED, remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

FOR 24-HOUR EMERGENCY ASSISTANCE, CALL CHEMTREC (800) 424-9300.

For other product information, contact Gowan Company or see Material Safety Data Sheet.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

- Harmful if swallowed or absorbed through the skin.
- Avoid breathing spray mist
- Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G 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 or Viton ≥ 14 mils
- Shoes plus socks

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.

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.

NET CONTENTS _____ GALLONS

EPA Reg. No. 10163-200

EPA Est. No. 10182-AR-1, 34704-MS-1

Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to any body of water. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from area treated.

PHYSICAL HAZARDS

Combustible. Do not use, store, pour, or spill near heat or open flame. Keep container closed when not in use.

GENERAL USE PRECAUTIONS

- READ ALL DIRECTIONS BEFORE USING.
- MIX WELL BEFORE DILUTING WITH WATER.
- PREFAR 4-E should be used only for recommended purposes and at recommended rates. (DO NOT OVERDOSE)
- Do not apply in combination with fluid fertilizers.
- Use on mineral soils only.
- Do not contaminate irrigation water.

All crops specified on the label may be planted in rotation but do not apply PREFAR 4-E more often than once every 12 months. To avoid injury to crops not specified on the label, do not plant until 18 months after the last PREFAR 4-E application. Soybeans may be planted 12 months after PREFAR 4-E application.

WEEDS CONTROLLED

Annual Grasses		Annual Broadleaf Weeds	(AZ, NM, TX and ten southern-most CA counties only)
Crabgrass	(<i>Digitaria spp.</i>)	Lambsquarters	(<i>Chenopodium album</i>)
Fall Panicum	(<i>Panicum dichotomiflorum</i>)	Purslane	(<i>Portulaca oleracea</i>)
Foxtail	(<i>Setaria spp.</i>)	Redroot Pigweed	(<i>Amaranthus retroflexus</i>)
Goosegrass	(<i>Eleusine indica</i>)		
Jungle Rice	(<i>Echinochloa colonum</i>)		
Sprangletop	(<i>Leptochloa spp.</i>)		
Watergrass	(<i>Echinochloa crusgalli</i>)		

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 interval. The requirements in this box only apply to uses of this product if it are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the product is soil-injected or soil-incorporated the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 or Viton ≥ 14 mils
- Shoes plus socks

DIRECTIONS FOR USE

BEST AVAILABLE COPY

Do not apply this product through any type of irrigation system.

PREFAR 4-E is a selective herbicide which is applied pre-plant and mixed (incorporated) into the soil. On certain crops which are irrigated up, PREFAR 4-E may be applied to the soil surface after planting. PREFAR 4-E controls weeds as their seeds germinate by interfering with normal germination and seedling development.

SOIL PREPARATION: Prepare the soil according to good agricultural practice. PREFAR 4-E does not control emerged weeds and all weed growth and crop stubble must be thoroughly worked into the soil prior to application.

APPLICATION AND SOIL INCORPORATION: Spray equipment should be carefully calibrated before use and checked frequently during application to be sure nozzles are free from clogging and are delivering a uniform spray pattern. Apply uniformly the recommended rate of PREFAR 4-E in 10 to 50 gallons of water per acre.

Pre-plant Application: Apply to well-worked soil that is dry enough to permit thorough incorporation. Incorporate to a depth of 1 to 2 inches before planting. Use power driven rotary cultivators or other equipment which will result in satisfactory incorporation.

Pre-emergence Application: (For use only on crops that will be irrigated up.) After planting apply PREFAR 4-E as a surface application, follow immediately with irrigation (sprinkler or furrow). For sprinkler irrigation apply 1 inch of water, wetting the soil at least 2 to 4 inches deep. For furrow irrigation thoroughly saturate the entire bed top (completely black out bed top).

RECOMMENDATIONS

All rates are given on a broadcast basis. Reduce rate proportionately for band treatment.

COTTON

Pre-plant: Apply 5 to 6 quarts PREFAR 4-E per broadcast acre. Apply to the flat soil surface before furrowing (listing) for the pre-planting irrigation and then continue with normal practices.

OR

Apply after furrowing (listing) but before the pre-planting irrigation. Incorporate with a sectional, rolling cultivator.

OR

Apply after the pre-planting irrigation but before the final seed bed preparation.

Pre-plant: (Arizona, New Mexico and Texas Only) For control of watergrass, jungle rice, foxtail and crabgrass only. Apply 2 quarts PREFAR 4-E per broadcast acre. Use only on light, sandy soils.

Apply to the flat soil surface and thoroughly disc the PREFAR 4-E into the soil before furrowing (listing) for the pre-planting irrigation and then continue with normal practices.

OR

Apply after furrowing (listing). Incorporate with a sectional, rolling cultivator. Follow with preplant irrigation.

Pre-emergence: (Use only on cotton that will be irrigated up.) Apply 5 to 6 quarts PREFAR 4-E per broadcast acre as a surface application.

CUCURBITS: (cucumbers, summer squash, winter squash, cantaloupes, crenshaw melons, muskmelons, persian melons, pumpkins, watermelons) Apply pre-plant, 5 to 6 quarts PREFAR 4-E per broadcast acre to flat-planted or bedded crops. Follow directions for APPLICATION AND SOIL INCORPORATION given on this label.

COLE CROPS: (broccoli, Brussels sprouts, cabbage, cauliflower) Apply pre-plant or pre-emergence, 5 to 6 quarts PREFAR 4-E per broadcast acre. Follow directions for APPLICATION AND SOIL INCORPORATION given on this label. Use pre-emergence only on cole crops to be irrigated up.

(NOTE: Limit use on cabbage to Southern and California/Arizona growing regions.)

FRUITING VEGETABLES: (tomatoes [direct seeded and transplants], seeded bell peppers, chili peppers) Apply pre-plant or pre-emergence, 5 to 6 quarts (4 to 5 quarts for tomatoes) PREFAR 4-E per broadcast acre. Follow directions for APPLICATION AND SOIL INCORPORATION given on this label. Use pre-emergence only on crops to be irrigated up.

(NOTE: Limit use on bell peppers to the Southern and California/Arizona growing regions, on chili peppers to the Southwestern U.S.)

LETTUCE: (head or leaf) Apply pre-plant or pre-emergence, 5 to 6 quarts PREFAR 4-E per broadcast acre. Follow directions for APPLICATION AND SOIL INCORPORATION given on this label. Use pre-emergence only on lettuce to be irrigated up.

ROOT CROP VEGETABLES

(NOTE: Limit use on carrots to Texas, on bulb onions to Idaho, New Mexico, Oregon, and Texas. Use on onions in Idaho and Oregon is restricted to fall application followed by spring planting.)

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CARROTS (Texas Only): Apply pre-plant or pre-emergence, 5 to 6 quarts PREFAR 4-E per broadcast acre. Follow directions for APPLICATION AND SOIL INCORPORATION given on this label. Use pre-emergence only on carrots to be irrigated up. Do not feed treated carrots to livestock.

BULB ONIONS (New Mexico and Texas): Apply pre-plant or pre-emergence, 5 to 6 quarts PREFAR 4-E per broadcast acre. Follow directions for APPLICATION AND SOIL INCORPORATION given on this label. Use pre-emergence only on onions to be irrigated up.

BULB ONIONS (Idaho and Oregon): For control of watergrass, redroot pigweed and common lambsquarters, prepare a good, flat seed bed by standard cultural practices. Apply in the fall 3 quarts of PREFAR 4-E per acre in 10 to 50 gallons of water in a 10 to 12 inch band and bed-up, throwing soil from the furrows over the sprayed band of PREFAR 4-E. Allow to remain undisturbed until spring. Prior to planting in spring, drag-off the bed tops with a spike-tooth harrow being careful not to drag off soil below the level of PREFAR 4-E application. Plant in the center of the beds.

GRASS SEED CROPS: (bentgrass, bluegrass) For *Poa annua* control in bentgrass and bluegrass seed fields, apply 2 to 2½ gallons PREFAR 4-E per acre to the soil surface after straw removal but before weed seed germination. If field has been burned, ashes should be completely dispersed before application of PREFAR 4-E.

Do not feed straw to livestock. Do not graze livestock in treated fields.

(NOTE: Limit use to Oregon, Washington and Idaho.)

PREFAR 4-E/ALANAP®

TANK MIX DIRECTIONS

*ALANAP is a registered trademark of Uniroyal Chemical.

A tank mix combination of PREFAR 4-E and ALANAP can be mixed (incorporated) into the soil before planting for weed control in cantaloupes, cucumbers, muskmelons and watermelons. This combination will control a broader spectrum of weeds than will either material used alone.

IMPORTANT—Follow all general DIRECTIONS FOR USE and USE PRECAUTIONS that appear on the ALANAP label and elsewhere on this label.

Weeds controlled by PREFAR 4-E/ALANAP combinations:

Annual Grasses: Watergrass (Barnyardgrass), Crabgrass, Fall Panicum, Foxtails, Goosegrass, Sprangletop.

Annual Broadleaf Weeds: Bindweed, Carpetweed, Chickweed, Cocklebur, Galinsoga, Groundcherry, Lambsquarters, Mustards, Pigweed, Purslane, Ragweed, Shepherds-purse, Velvetleaf.

DIRECTIONS FOR USE

Soil Preparation: Prepare the soil according to good agricultural practice. All weed growth and crop stubble must be thoroughly worked into the soil.

Tank Mixing Directions: Combine PREFAR 4-E and ALANAP in the spray tank in the recommended dosage proportions using 10 to 40 gallons of water per acre of area to be treated.

Spray equipment should be carefully calibrated before use and checked frequently during application to be sure nozzles are free from clogging and are delivering a uniform spray pattern.

Pre-plant Application and Soil Incorporation: Apply 4 to 6 quarts per acre of PREFAR 4-E plus 4 to 8 quarts of ALANAP in sufficient water (10 to 40 gallons) to provide thorough coverage. Incorporate lightly (1/2 to 1 inch) into the soil using suitable equipment just prior to planting. Use lower rates on light (sandy) soils and higher rates on heavier (clay) soils. Reduce the rate proportionately for band applications. Incorporation is not necessary if the application is followed by immediate irrigation.

STORAGE AND DISPOSAL

* Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Protect from temperatures below 42° F. At temperatures below 42° F, product may crystallize. Dissolve crystals with quiet storage at warm temperatures (75° F). Redissolution rate: 40 - 48° F (40-60 days); 60° F (1-3 weeks); 70 - 80° F (1-3 days). Roll container and agitate contents to provide a uniform product prior to use.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

SPILL OR LEAK: Small spills can be handled routinely. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation. Wear suitable protective clothing to prevent skin and eye contact. Use the following procedures:

1. Spread a suitable absorbent such as clay, sawdust or kitty litter on the spilled material.
 2. Place sweepings in an appropriate chemical waste container.
 3. Generously cover the contaminated areas with a common household detergent. Using a stiff brush and small amounts of water, work the detergent into the spill material forming a slurry. Do not splatter on one's self or bystanders and completely avoid skin or eye contact with this material. Brush the slurry into cracks and crevices and allow to stand for 2-3 minutes.
 4. Spread absorbents on the slurred liquid and shovel the absorbed material into the container.
 5. Repeat if necessary.
 6. Flush the area with water while observing proper environmental considerations.
 7. Seal container and dispose of in approved pesticide landfill.
- Large spills should be handled according to a predetermined plan. For assistance in developing a plan, contact Gowan Company, P.O. Box 5569, Yuma, AZ 85366-5569.

NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility including injury or damage, resulting from its misuse as such, or in combination with other materials.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified. Country: United States of America.