

2217-832

9-27-2001

Yellow

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:
2217-832

Date of Issuance:
SEP 27 2001

Term of Issuance:
Conditional

Name of Pesticide Product:
Carfentrazone-ethyl
40DF Herbicide

NOTICE OF PESTICIDE:
 x Registration
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

PBI/Gordon
P.O. Box 014090
Kansas City, Missouri 64101

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit/cite all data required for the registration/reregistration review of your product when the Agency requires all registrants of similar products to submit such data.
2. Make the following label changes:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. 2217-832".
3. Submit two copies of the revised final printed label for the record.

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

Signature of Approving Official:

Date:

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

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

Enclosure

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CARFENTRAZONE-ETHYL 40DF HERBICIDE

ACTIVE INGREDIENT:	By Wt.
Carfentrazone-ethyl: Ethyl α ,2-dichloro-5-[4(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzenepropanoate	40.0%
INERT INGREDIENTS:	60.0%
	100.0%

Contains 40% W/W of active ingredient per pound of product.
 U.S. Patent No. 5, 125,958

KEEP OUT OF REACH OF CHILDREN

CAUTION

First Aid Statement

If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO MEDICAL DOCTOR: Carfentrazone-ethyl 40DF is expected to have low oral and dermal toxicity, and moderate inhalation toxicity. It is expected to be slightly irritating to the skin and minimally irritating to the eyes. This product contains a granular material (sand) that may cause mechanical irritation to the eyes. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

See side panels for additional precautionary information.

NET CONTENTS: _____

EPA Reg. No. 2217-XXX

EPA Est. No. 279-

Manufactured By:



ACCEPTED
with COMMENTS
In EPA Letter Dated

SEP 27 2001

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

2217-832

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READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

PRECAUTIONARY STATEMENTS

Hazards to Humans (and Domestic Animals)

CAUTION: Harmful if swallowed, absorbed through the skin or inhaled. Causes moderate eye irritation. Avoid breathing dust. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE):

Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. 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.

User Safety Recommendations:

Users should:

- ◆ Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

Carfentrazone-ethyl is very toxic to algae and moderately toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the high water mark, except as specified on this label. Do not contaminate water when disposing of equipment washwater.

Physical/Chemical Hazards

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

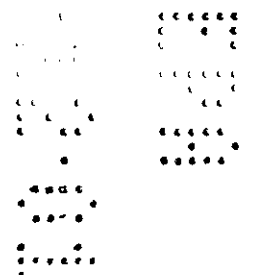
Do not apply this product through any type of irrigation system.

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.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Reentry Statement: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried.



GENERAL INFORMATION:

Carfentrazone-ethyl 40DF Herbicide is a water dispersible granule formulation. It is designed to be mixed with water and applied to ornamental lawns and turfgrass for selective postemergent control of broadleaf weeds. Weed control is best when the product is applied to small actively growing weeds (1-4 inches in height). Carfentrazone-ethyl 40DF is a contact herbicide with little or no residual activity at recommended use rates.

Carfentrazone-ethyl 40DF is rapidly absorbed through the foliage of plants. The herbicide is rainfast within one hour after application. Within a few hours following application, the foliage of susceptible weeds show signs of desiccation, and in subsequent days necrosis and death of the plant. Due to environmental conditions and certain spray tank additives, some herbicidal symptoms may appear on turfgrass.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of Carfentrazone-ethyl 40DF. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to Carfentrazone-ethyl 40DF.

Unless specified on this label, do not tank mix Carfentrazone-ethyl 40DF with other herbicides.

MIXING AND LOADING INSTRUCTIONS:

Fill the spray tank ¾ full with clean water. Make sure the agitation system is operating. Add the recommended amount of Carfentrazone-ethyl 40DF and complete filling the spray tank to the desired level. The spray tank agitation should be sufficient to ensure uniform spray mixture during application. When tank mixing with other products, Carfentrazone-ethyl 40DF should be mixed first in the spray tank. After the product is thoroughly mixed, add the other products as specified on their label. Ensure the compatibility of other products with Carfentrazone-ethyl 40DF before mixing them in the spray tank.

Do not use with tank additives that alter the pH of the spray solution below pH5 or above pH8. Buffer spray solution to alter the pH range as appropriate.

GROUND APPLICATIONS:

For best spray distribution and coverage, select a spray volume and delivery system that will ensure accurate and uniform coverage. Use a boom sprayer equipped with appropriate nozzles, tips, and screens. Use flat fan nozzle tips and in-line strainers equipped with no finer than 50 mesh screens.

Do not use flood nozzles, Raindrop®, or nozzle tips larger than 8008. Spray droplets larger than 400 microns may reduce coverage and subsequent loss in weed control. Applications should be made using spray volumes of 5-175 gallons per acre. Use higher spray volumes when there is a dense weed population or crop canopy. Use spray pressures of 20-40 psi.

Do not apply when conditions are conducive to spray drift or poor spray coverage.

Before using sprayer equipment exposed to Carfentrazone-ethyl 40DF, clean equipment thoroughly using the following procedure:

1. Drain sprayer tank, hoses, and boom and thoroughly rinse the inside of the sprayer tank free of visible sediment and residues. Flush thoroughly sprayer hoses, boom and nozzles.
2. Fill the tank one-half (½) full with clean water, and add appropriate detergent (follow manufacturer's directions for use). Fill the tank to capacity and operate the sprayer for 15 minutes to flush hoses, boom and nozzles.
3. Drain the sprayer system. Rinse the tank with clean water and flush through the hoses and boom. Remove and clean nozzles separately.

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TURFGRASS AND SITES:

Carfentrazone-ethyl 40DF is intended to be applied by lawn care operators, maintenance applicators, and service technicians for use in ornamental lawns and turf established in institutional, ornamental, and residential/domestic sites. Institutional sites are defined as turf areas around properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses, and office buildings. Ornamental sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings. Finally, residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes, condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.

Newly seeded and established turf of Kentucky bluegrass, perennial ryegrass, tall fescue, fine leaf fescues, and creeping bentgrass may be treated. Common bermudagrass, hybrid bermudagrass, bahiagrass, zoysiagrass, St. Augustinegrass, and centipedegrass may be treated. Do not apply this product to carpetgrass, dichondra, nor on lawns or turf where desirable clovers are present.

The turfgrass tolerance to Carfentrazone-ethyl 40DF varies and temporary turf phytotoxicity may be expected. Also, the use of Carfentrazone-ethyl 40DF on varieties (F- hybrids) of hybrid bermudagrass may result in unacceptable injury (damage, phytotoxicity).

APPLICATION SCHEDULES FOR ORNAMENTAL LAWNS AND TURFGRASS:

Early postemergent applications of Carfentrazone-ethyl 40DF alone are recommended. Apply Carfentrazone-ethyl 40DF to broadleaf weeds that are emerged and actively growing (1-4 inches in height).

Carfentrazone-ethyl 40DF may be tank mixed with other herbicides EPA-registered for use on ornamental lawns and turfgrass to broaden the weed control spectrum compared to the products alone. *Unless specified on this label, do not tank mix with other herbicides.* Observe all precautions, instructions, limitations and guidelines of each product's label when tank mixing.

Tank mixtures are recommended for more mature weeds (greater than 1 - 4 inches in height) and for dense infestations of annual, biennial, and perennial weeds. Sequential or follow-up applications may be required for dense infestations of perennial and biennial broadleaf weeds.

USE RATES AND SPRAY VOLUMES FOR ORNAMENTAL LAWNS AND TURFGRASS:

Use rates and spray volumes of Carfentrazone-ethyl 40DF and tank mixtures for use in ornamental lawns and turfgrass are presented in Table 1.

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

The maximum application rate of this product to turfgrass is 1.24 ounces of product (0.031 pounds of carfentrazone-ethyl) per acre per application per site. The maximum number of broadcast applications to turfgrass is three (3) per year.

The maximum seasonal rate of carfentrazone-ethyl contained in this product with three (3) broadcast applications to turfgrass is 3.72 ounces of product (0.093 pounds of carfentrazone-ethyl) per acre per season. The retreatment interval for sequential broadcast applications of this product on turfgrass is two (2) to six (6) weeks depending upon the growth stages of the target weeds.

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TABLE 1. RATE RECOMMENDATIONS FOR ORNAMENTAL LAWNS AND TURFGRASS.

Species	Carfentrazone-ethyl 40DF alone, Amt. of Product (Oz.)/Acre	Tank Mixtures of Carfentrazone-ethyl 40DF, Amt. of Product (Oz.)/Acre	Spray Volume, Gallons/Acre
Cool Season Turf			
Kentucky Bluegrass	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Perennial Ryegrass	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Fescue <i>spp.</i>	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Creeping Bentgrass	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Warm Season Turf			
Common Bermudagrass	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Bahiagrass	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Zoysiagrass	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Centipedegrass	0.66 to 1.24 ounces	≤ 1.24 ounces	5 to 175
Hybrid Bermudagrass	0.33 to 0.92 ounces	≤ 0.92 ounces	5 to 175
St. Augustinegrass	0.33 to 0.92 ounces	≤ 0.92 ounces	5 to 175

TANK MIXTURES FOR POSTEMERGENT APPLICATIONS FOR ORNAMENTAL TURFGRASS:

Carfentrazone-ethyl 40DF may be applied in combination with one or more of the following herbicides for improved control of broadleaf weeds (Table 2). *Unless specified on this label, do not tank mix with other herbicides.* These tank mixtures must be used according to the most restrictive label limitations and precautions. No label dosage rate should be exceeded. Follow the labeling of each companion product for precautionary statements, directions for use, dosage rates, and application schedules. Tank mixture recommendations are for use only in states where the companion products and application site are registered. In addition, certain states or geographic regions may have established dosage rate limitations. Consult your State Pesticide Control Agency for additional information regarding the maximum use rates.

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TABLE 2. TANK MIXTURES FOR POSTEMERGENT APPLICATIONS FOR ORNAMENTAL TURFGRASS.

COMMON NAME	TRADE NAME
2,4-D, diethanolamine and/or dimethylamine salts	Gordon's Hi-Dep® Broadleaf Herbicide Gordon's Amine 400 2,4-D Weed Killer
2,4-D, isooctyl (2-ethylhexyl) ester	Gordon's LV 400 2,4-D Weed Killer
2,4-D, acid mixtures	Trimec® Classic Brand DSC Broadleaf Herbicide
Mecoprop, dimethylamine salts	Gordon's Mecomec 4 Turf Herbicide Gordon's Mecomec 2.5 Turf Herbicide
2,4-D, mecoprop, and dicamba, dimethylamine salts	Trimec® Classic Brand Broadleaf Herbicide Trimec® Southern Broadleaf Herbicide for Sensitive Southern Grasses Trimec® Broadleaf Herbicide, Bentgrass Formula Trimec® 992 Broadleaf Herbicide Trimec® LAF-637 Broadleaf Herbicide Trimec® Turf Herbicide Trimec® 899 Broadleaf Herbicide
2,4-D, dichloroprop and dicamba, isooctyl (2-ethylhexyl) ester	Gordon's Super Trimec® Broadleaf Herbicide Gordon's Trimec® Turf Ester
MCPA, dimethylamine salt	Gordon's MCPA Lawn Weed Killer Gordon's MCPA Amine 4
MCPA, mecoprop and dicamba, acid mixtures	Encore® DSC Broadleaf Herbicide
MCPA, mecoprop and dicamba, dimethylamine salts	Trimec® Encore® Broadleaf Herbicide Trimec® 959 Broadleaf Herbicide
2,4-D, mecoprop and dicamba, dimethylamine salts, and MSMA	Trimec® Plus Post-Emergent Grass & Broadleaf Herbicide

When applied as directed, Carfentrazone-ethyl 40DF alone or with specified tank mixtures will control the following weeds:

Partial List of Broadleaf Weeds (up to 4 inches)*		
Bedstraw, catchweed	Ground ivy	Plantain (buckhorn, narrow leaf)
Buttonweed, virginia	Henbit	Purslane
Burweed, lawn	Lambsquarters, common	Speedwell, corn
Chickweed	Pennycress, field	Spurge, spotted
Clover, white	Pigweed (prostrate, redroot, smooth)	
Dandelion		

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STORAGE AND DISPOSAL

Pesticide Storage:

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put granule or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by inappropriate storage or disposal.

In case of spill, avoid contact, isolate area and keep out unprotected persons and animals. Confine spills.

To confine spill: Dike surrounding area, sweep up spillage. Dispose of in accordance with information given under Pesticide Disposal. Wash spill area with water, absorb with sand, cat litter or commercial clay, sweep up and dispose of in an approved manner. Place damaged container in a larger holding container. Identify contents per required hazardous waste labeling regulations.

Pesticide Disposal:

Waste resulting from the use of this product may be disposed of at an approved waste disposal facility.

Container Disposal:

Plastic Containers: Triple rinse (or equivalent). Then offer for approved pesticide container recycling program, or puncture and dispose of in an approved waste disposal facility, or incineration, provided that site incineration is allowed by state and local authorities, stay out of smoke.

LIMITED WARRANTY AND DISCLAIMER.

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

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