



48273-13

8-19-1996

1/8

	U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C) 401 "M" St., S.W. Washington, D.C. 20460	EPA Reg. Number: 48273-13	Date of Issuance: AUG 19 1996
	NOTICE OF PESTICIDE: <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Reregistration	Term of Issuance: Until Reregistration	
	(under FIFRA, as amended)	Name of Pesticide Product: PESTBAN 2E	
Name and Address of Registrant (include ZIP Code): Marman USA, Inc. 5041 W. Cypress Street Tampa, Florida 33607-3803			
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 and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.			
2. Make the following label changes:			
a. Revise the EPA Registration Number to read, "EPA Reg. No. 48273-13".			
b. Delete the ambiguous term "Specialty Insecticide."			
c. Revise the Ingredients Statement as follows: chlorpyrifos = 24.8%, inert ingredients = 75.2%. This is according to the current Dursban 2E labeling in our files, dated July 8, 1996.			
Signature of Approving Official:  Dennis H. Edwards, Jr. Product Manager 19 Insecticide-Rodenticide Branch Registration Division (7505C)		Date: AUG 19 1996	

- d. The second sentence of the Environmental Hazards statement must be updated in accordance with PR Notice 93-3 to read "Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark."
- e. In the Physical and Chemical Hazards section, add the precaution "Do Not Cut or Weld Container."
- f. Change the word "irritation" to "irrigation" at the top of page 2.
- g. In the first paragraph of the "General Information" section, delete the reference to mosquito control. All use directions for mosquito control (except for surface applications to structures) must also be deleted.
- h. In the "Use Precautions" for area control of ticks and chiggers, change "ally" to "allow."
- i. On the last page, delete the term "Agricultural Chemical."

3. Submit two copies of the revised final printed label for the record.

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.

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

Sincerely,

DHE

Dennis H. Edwards, Jr.
Product Manager 19
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure

3/8

PESTBAN 2E

Specialty Insecticide

To be applied only by or under the direct supervision of commercial applicators responsible for insect control programs. Sale to or use by persons owning or occupying a dwelling is strictly prohibited.

ACTIVE INGREDIENT:

chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate 24.1%

INERT INGREDIENTS: 75.9%

Total 100.0%

} 24.1
75.9

Contains 2 pounds of chlorpyrifos per gallon.

Keep Out of Reach of Children

WARNING AVISO

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

See Back Panel For Additional Precautionary Statements

ACCEPTED
with COMMENTS
in EPA Letter Dated

AUG 19 1996

NET CONTENTS: _____

EPA Reg. No. 48273-^{RG}RR EPA Est. 464-MI-1

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

48273-13

MARMAN USA, INC.

P.O. Box 22829; Tampa, FL 33622-2829

[Back Panel]

PRECAUTIONARY STATEMENTS Hazards to Humans & Domestic Animals

WARNING: May be fatal if swallowed. Excessive absorption through skin may be fatal. Causes substantial but temporary eye injury. Causes skin irritation. Do not get in eyes, on skin or clothing. Wear eye protection. Handle concentrate in a ventilated area. Wear protective clothing and chemically resistant gloves when handling. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Keep away from food, feedstuffs and water supplies.

Statement of Practical Treatment

If Swallowed: Call a physician or poison control center immediately. Do not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to an unconscious person. **If on Skin:** Immediately wash with plenty of soap and water. Get medical attention. **If in Eyes:** Flush with plenty of water for 15 minutes. Get medical attention. **If Inhaled:** Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately. **Note to Physician:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferably antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

Environmental Hazards

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Physical or Chemical Hazards

Combustible. Do not use or store near heat or open flame.

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read *Warranty Disclaimer and Limitation of Remedies* elsewhere on this label.

DIRECTIONS FOR USE

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

Carefully read all *Directions for Use* before applying.
Do not apply this product through any type of irrigation system.
Do not formulate this product into other end-use products.

Not for use on plants grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climactic modification and being grown in interior plantscapes, ornamental gardens or parks, or on golf courses or lawns and grounds.

Storage and Disposal

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

STORAGE: Store in original container in secured dry storage area. Prevent cross-contamination with fertilizers and other pesticides. Do not store above 100°F for extended periods of time. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below. **PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal or excess pesticide, spray mixture or rinsate is a violation of Federal law. 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: Metal:** Triple rinse (or equivalent) and offer for recycling or reconditioning or dispose of in a sanitary landfill or by other approved state and local procedures. **Plastic:** Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Pests Indoors:

GENERAL INFORMATION

Use this product to control the pests indicated in the areas listed below by application as a 0.25% or 0.5% chlorpyrifos spray. Use the 0.25% spray to control light infestations and the 0.5% spray to quickly reduce heavy infestations or as directed. To prepare the spray, dilute this product with water or with a suitable base oil¹ as shown in the following *Spray Dilution Chart*. Repeat the treatment as needed.

¹Use only deodorized kerosene for oil-based sprays to be applied in food handling establishments.

Note: Where quick "knockdown" and/or "flushing action" is desired, pyrethrins may be added to the spray mixture containing this product. For best results, use pyrethrins at 0.25% in water-base and 0.05% in oil-base sprays. Consult labeling for the pyrethrins product used to determine the amount needed to give the desired spray concentration. Also read and observe all use and handling precautions for these products.

Spray Dilution Chart

Gallons of Spray Mixture Desired	Fluid Ounces ¹ of This Product to Use	
	0.25% Spray	0.50% Spray
Water-Base Spray		
1	1-1/3	2-2/3
3	4	8
5	6-2/3	13-1/3
10	13-1/2	26-2/3
Oil-Based Spray ²		
1	1	2
3	3	6
5	5	10
10	10	21

¹Note: 1 fluid ounce = 2 tablespoonfuls = 6 teaspoonfuls

²Calculated on basis of deodorized kerosene

Use Precautions

Do not apply water-base sprays of this product in conduits, motor housings, junction and switch boxes or other electrical equipment because of possible shock hazard. If there is a need to treat such areas use only oil-base sprays. Prior to application de-energize electrical equipment.

After application allow time for it to evaporate before starting motors or placing switches in the "ON" position. Do not use in poultry houses. Do not allow spray to contact food, feedstuffs and water supplies. Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product. Do not allow children or pets to contact treated surfaces until spray has dried. Remove pets and cover fish bowls (tanks) before spraying.

Application Within Food Handling Establishments (Places other than private residences in which food is held, processed, prepared or served) Including, but not limited to, Restaurants, Grocery Stores, Bakeries, Bottling Plants, Canneries and Grain Mills: Use as a spot treatment in and around both food and nonfood areas to control cockroaches (including strains resistant to certain other insecticides), ants, crickets, firebrats, silverfish, spiders and stored product insects such as confused flour beetles, sawtoothed grain beetles, Indian meal moths, rice weevils, Mediterranean flour moths and red flour beetles. Apply as a coarse, low pressure (20 psi or less) spray to localized areas where the above pests have been seen or are suspected of hiding or entering. Apply only enough spray to thoroughly cover the surfaces treated using special care to avoid unnecessary runoff. Do not introduce the spray into the air or allow the spray to contact food or food-contacting surfaces. Areas treated may include dark corners of rooms and closets; along and behind baseboards; beneath and behind stoves, refrigeration units and similar food preparation areas and equipment; floor drains; and around plumbing and other utility installations. For ants apply to ant trails and wherever these pests may find entrance. Spot treatment may encompass crack and crevice treatment by applying small amounts of material directly into openings leading to voids and hollow spaces in walls, equipment legs and bases or which occur at points between different elements of construction or between equipment and floors. Equipment capable of delivering a pinstream of insecticide should be used. Repeat treatment as needed to not more than once every 7 days in restaurants and similar food service establishments or more often than once every 14 days in other types of food handling establishments. In case of emergency (call back), this product may be applied after 2 days from last treatment but emergency use should be limited to once per month. Applications of this product in food handling establishments other than as a spot and/or crack and crevice treatment are not permitted.

Application Within Residential Buildings Including Homes and Apartment Buildings and Within Nonfood Areas of Industrial, Institutional and Commercial Buildings Including Hospitals, Stores, Manufacturing Plants and Warehouses (For Spot Treatment Only): Apply as a coarse spray or with a paint brush to localized areas where cockroaches (including strains resistant to certain other insecticides), ants, clover mites, crickets, firebrats, silverfish and spiders are found or normally occur including dark corners of rooms and closets; cracks and crevices in walls; along and behind baseboards; beneath and behind sinks, stoves, refrigerators and cabinets; around plumbing and other utility installations. For ants apply to ant trails, also around doors and windows and wherever else these pests may find entrance. For clover mites use only a 0.5% spray. Note: A period of 4 to 7 days is normally required for maximum effect on cockroaches.

For control of carpet beetles, thoroughly apply as a 0.5% spray as a spot treatment along baseboards and edges of carpeting, under carpeting, rugs and furniture, in closets and on shelving, and wherever else these insects are seen or suspected.

For control of brown dog ticks, thoroughly apply a 0.5% spray as a spot treatment to infested areas such as pet beds and resting quarters; nearby cracks and crevices; along and behind baseboards; window and door frames and localized areas of floor and floor covering where these pests may be present. Old bedding of pets should be removed and replaced with clean, fresh bedding after treatment. Do not treat pets with this product.

Pests Outdoors:

GENERAL INFORMATION

Use this product for control of certain pests on outside surfaces of buildings and on lawns and ornamental plants, for area control of ticks and chiggers. Consult the following directions for dosage and application details to control the pests listed.

Pests on Outside Surfaces of Buildings: Use this product at the rate of 2-2/3 fluid ounces per one gallon of water (0.5% chlorpyrifos emulsion) to control ants, clover mites, cockroaches, crickets, earwigs, fleas, flies, millipedes, mosquitoes, sowbugs, spiders and ticks by application as a residual spray or with a paint brush to outside surfaces of buildings including porches, screens, window frames, eaves, patios, garages, refuse dumps and other areas where these pests congregate or have been seen. Repeat treatment as needed to maintain effectiveness.

Note: To help prevent reinfestation of buildings by ants, crickets, earwigs, millipedes and sowbugs (pillbugs), treat a band of soil 6 to 10 feet wide around and adjacent to buildings, also the building foundation to a height of 2 to 3 feet, where pests are active and may find entrance. Use 1 pint of this product per 100 gallons of water and apply as a coarse spray at the rate of about 10 gallons spray mixture per 1,000 square feet to thoroughly and uniformly wet the band area.

Pests of Lawns and Other Ornamental and Recreations Turf Grass Areas: Use this product to control pests listed in the following table by application at the recommended dosages and in accordance with the directions given below. Dilute this product in enough water to obtain complete and uniform coverage of pest infested areas and apply as a coarse, low pressure spray using suitable application equipment. Thoroughly water immediately after treatment to wash the insecticide into the turf, except as noted. For best results, the lawn should be moist at time of treatment.

Dosage and Directions for Use on Turf

PEST	DOSAGE THIS PRODUCT PER 1,000 SQ. FT.	REMARKS
Ants, Armyworms, Chiggers, Chinch bugs, Clover mites, Crickets, Cutworms, Earwigs,	1 1/2 fl. oz.	Spray when pests first appear, retreat when needed. For sod webworms delay watering

PEST	DOSAGE THIS PRODUCT PER 1,000 SQ. FT.	REMARKS
Fleas, Grasshoppers, Sod Webworms, Ticks		or mowing the treated areas from 12 to 24 hours after treatment.
Turfgrass (<i>Hyperodes</i>) weevil	3 fl. oz.	Spray suspected problem areas in mid-April and again in mid-May or as recommended by your local agricultural extension service specialist in your area.
White grubs: European chafer, Southern chafer and Japanese beetle larvae	3 - 6 fl. oz.	For white grubs spray when grubs are young and actively feeding near the soil surface, usually during late July and August or as recommended by your local agricultural extension service specialist in your area. Immediately after spraying irrigate the treated area with 1/2 to 1 inch of water to wash the insecticide into the underlying soil.
Bluegrass billbug	3 - 6 fl. oz.	Spray early in the season when adults first appear. Retreat when needed.

¹1 1/2 fl. oz. per 1,000 sq. ft. = 7 1/2 per 5,000 sq. ft. = 1 pint per 10,700 sq. ft. = 2 quarts per acre.

Pests of Ornamentals: Use this product to treat flowers, shrubs, vines, shade and flowering trees, and evergreens found to be infested with pests listed in the following table. Dilute this product with water according to directions given in the table and apply using suitable hand or power spray equipment in a manner to provide complete and uniform coverage. For best results apply a wetting spray to both upper and lower leaf surfaces and infested limb and trunk areas. Attempt to penetrate dense foliage but avoid overspraying to the point of excessive runoff. Treat when pests appear and repeat at 7 to 10 days intervals, if needed. **Note:** Do not use on azaleas, camellias, poinsettias, rose bushes or variegated ivy because of possible injury to these plants.

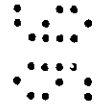
Use Precautions for Lawn and Ornamental Plant Pests: Keep children and pets off treated areas until spray has dried. keep out of lawn and garden fishpools and other bodies of water.

Wood Boring Insects Infesting Shrubs and Trees Such as Dogwood Borer, Lilac Borer, Ash Borer and Rhododendron Borer: Apply this product to the trunks and lower limbs of trees and shrubs when the adults begin to emerge. Consult your state agricultural experiment station or extension service specialist for proper time to treat in your area. Mix at the rate of two quarts of this product in 100 gallons of water and apply uniformly as a coarse low-pressure spray.

Peach Tree Borer: Apply this product to flowering trees and shrubs of the genus *Prunus* in water as a trunk spray before newly hatched larvae enter the trees. Apply as a coarse, low-pressure spray. Thoroughly wet all bark areas from ground level to scaffold limbs. Consult your state agricultural experiment station or extension service specialist for proper time to treat your area. **Note:** Mosquitoes coming to rest on areas treated for control of turf and ornamental plant pests will be killed for varying periods of time after treatment, depending upon exposure of treated areas to weathering conditions.

Native Elm Bark Beetle: Prevention of Overwintering: To prevent the adult beetle from overwintering in uninfected trees and to reduce beetle populations in disease free areas, apply this product as a 0.5% mixture of chlorpyrifos in water to the bottom 9 feet of trunk. Thoroughly wet the trunk but do not spray to runoff. Care should be taken to apply the spray right to the base of the root flare. Applications can be made with either a back pack mist blower or a hydraulic pressure sprayer from spring through to the early fall. **Prevention of Branch and Twig Feeding on High Value Elm Trees:** To reduce the twig and branch feeding on uninfected trees deemed to be high in value apply a 0.5% chlorpyrifos water spray to the tree crown. Application should be made in the spring or early summer using a sprayer that will give thorough coverage to the tree crown.

Imported Fire Ant: Treatment of Fire Ant Mounds: Apply this product as a drench diluted at the rate of 1 fl. oz. (30 cc) per 2 gallons of water. Gently sprinkle a total of 1 gallon of the diluted solution over the surface of each mound using a sprinkler can. Thoroughly wet mound and surrounding area to a 4 foot diameter (12 square feet). For best results apply in cool weather, 65-80°F, or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.



Dosages and Dilutions for Use on Ornamental Plants

Pests Controlled	Amount of This Product In Water to Make		
	3 gallons	10 gallons	100 gallons
Aphids, Bagworms, Eastern tent caterpillar, Fall webworm, Grasshoppers, Mites, Orangestriped oakworm, Spittlebugs, Whiteflies, Yellownecked caterpillar	0.5 fl. oz.	1.6 fl. oz.	1 pt. ¹
Cutworms, Leafhoppers, Mealy bugs, Mimosa webworm, Redhumped caterpillar, Thrips (exposed)	1.0 fl. oz.	3.2 fl. oz.	1 qt. ²
Ash borer, Lilac borer, Dogwood borer, Rhododendron borer, Scale crawlers (Oak lecanium, Pine needle, Tea, White peach)	2.0 fl. oz.	6.4 fl. oz.	2 qts. ³
Peach tree borer	5.8 fl. oz.	19.2 fl. oz.	6 qts. ⁴

¹Equivalent to 4 ounces of chlorpyrifos per 100 gallons

²Equivalent to 8 ounces of chlorpyrifos per 100 gallons

³Equivalent to 1 pound of chlorpyrifos per 100 gallons

⁴Equivalent to 3 pounds of chlorpyrifos per 100 gallons

Area Control of Ticks and Chiggers: Use this product to control ticks and chiggers infesting non-cropland areas such as roadsides, footpaths and trails, picnic and camping sites, parks and other recreational areas where these pests are present and create a nuisance or possible public health problem. Apply this product in water at the rate of 1 pint per acre (equivalent to 1 fl. oz. per 2,700 sq. ft.) using a hydraulic sprayer, mist applicator, knapsack sprayer, or other suitable hand or power spray equipment. Treat low underbrush, grassy areas, weeds and ground surface and debris using enough spray volume to obtain thorough coverage, usually 40 to 100 gallons per acre. **Use Precautions:** Do not allow public use of treated areas during application or until spray has dried.

Mosquitoes: Apply this product to mosquito-infested, non-crop areas according to the conditions and rates shown in the following table. Mix this product with either water or oil, such as kerosene or No. 2 fuel oil, using sufficient spray volume to give uniform coverage of area treated. Apply the spray using suitable application equipment such as hand and power ground sprayers, mist applicators and aerial spray equipment. *Note: Read complete Environmental Hazards and Directions for Use and consult your state fish and game department before using this product for mosquito control.*

Conditions and Rates to Use for Mosquito Control

Conditions of Areas To Be Treated	Amount to Use Per Acre		Number Acres 1 Gallon of This Product Will Treat
	This Product (fluid ounces)	Chlorpyrifos (Pounds)	
Adult Control (light to medium vegetative cover)	1.6	0.025	80
Adult Control (medium to heavy vegetative cover)	3.2 ¹	0.05 ¹	40

¹The higher dosage will also give faster knockdown and longer residual control where there is little or no vegetative cover.

Warranty Disclaimer

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. This Company makes no other express or implied warranty of merchantability or fitness for a particular purpose or any other express or implied warranty.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of this Company or the seller. All such risks shall be assumed by Buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability or other legal theories) shall be limited to, at this Company's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

This Company shall not be liable for losses or damages resulting from handling or use of this product unless this Company is promptly notified of such loss or damage in writing. In no case shall this Company be liable for consequential or incidental damages or losses.

The terms of the *Warranty Disclaimer* and the *Limitation of Remedies* cannot be varied by any written or verbal statements or agreements. No employee nor sales agent of this Company or the seller is authorized to vary or exceed the terms of the *Warranty Disclaimer* or this *Limitation of Remedies* in any manner.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

