

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDE PROGRAMS
REGISTRATION DIVISION
WASHINGTON, D.C. 20460

NOTICE OF PESTICIDE

Product Name
and Registration Number

Label
Number

Product Address or Name

Product Name

NOTE: Changes in labeling formula 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 for commerce. In any correspondence on this product always refer to the above U.S. 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.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an endorsement or approval of this product by this Agency. In order to protect health and the environment, the Agency retains the authority to suspend or cancel the registration of a pesticide in accordance with the Act. It is the responsibility of any person who markets or uses a product under this Act to follow the instructions on the label and to use the product in accordance with the name or to its use if it has been changed by the Agency.

July 24, 1971
Product Manager (12)
Insecticide, Fungicide Branch
Registration Division (TS-767)

Enclosure

☐ ATTACHMENT IS APPLICABLE

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SIGNATURE OF APPROVING OFFICIAL

Ray S. Ellenberger

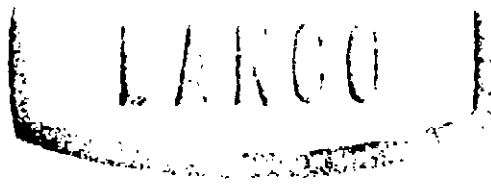
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INSECTICIDE

Controls Numerous Pests of Households, Turf & Ornamental Plants, Also
Recommended for Mosquito Control & Area Control of Fleas & Chiggers

To Be Applied Only By or Under the Supervision of Pest Control operators,
Public Health Organizations, Mosquito Abatement Agencies, and Other
Trained Personnel Responsible for Insect Control

ACTIVE INGREDIENTS:

Chlorpyrifos: [0,0-diethyl 0-(3,5,6-trichloro-2-pyridyl) phosphorothioate]	24.04%
Aromatic petroleum derivative solvent	69.75%
INERT INGREDIENTS	5.01%
Contains 2 pounds of chlorpyrifos per gallon	Total 100.00%

KEEP OUT OF REACH OF CHILDREN

WARNING

See Side Label for Additional Precautionary Statements

*DURSEAN Reg. U.S. Pat. & Trad. Office - U.S. Patent No. 3,244,580

Statement of Practical Treatment

If Swallowed: Do not induce vomiting. Contains aromatic petroleum
solvent. Call a physician immediately. If On Skin: In case of contact,
remove contaminated clothing and immediately wash skin with soap and
water. If In Eyes: Flush eyes with plenty of water for 15 minutes.
Call a physician.

Note To Physician: Chlorpyrifos is a cholinesterase inhibitor. Treat
symptomatically. Atropine only by injection is an antidote.

EPA Reg. No. 9859-*EHG*

EPA Est. No. 9859-FL-1

Net Contents _____ Gallon

LANDIA CHEMICAL CO.
P.O. Drawer A0
LAKELAND, FLORIDA 33801

ACCEPTED
with comments
in EPA Reg. No. 9859-FL-1

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SEE PAGE 2

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DURSABAN 2E

Page 1 of 1

For use as a spot treatment in and around food handling establishments to control cockroaches (including strains resistant to other insecticides), ants, crickets, firebrats, silverfish, spiders and stored product insects such as confused flour beetles, saw-toothed 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 DILUTION CHART

General Information: Use DURSABAN 2E insecticide to control the pests indicated in the areas listed below by application of 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 DURSABAN 2E with water or with a suitable base oil. Refer to the following SPRAY DILUTION CHART. Repeat the treatment as needed.

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

NOTE: Where quick "knockdown" and/or "flushing action" is desired, dichlorvos (DDVP) or pyrethrins may be added to the spray mixture containing DURSABAN 2E insecticide. For best results, use dichlorvos at a concentration of 0.25% in both water and oil-base sprays. Consult labeling for the dichlorvos or 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. Do not use DURSABAN 2E in combination with dichlorvos (DDVP) or pyrethrins for treatment of food areas of food handling establishments.

SPRAY DILUTION CHART

Gallons of Spray Mixture Desired	Fluid Ounces* of DURSABAN 2E 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	13-1/3	26-2/3
Oil-based spray**		
1	1	2
3	3	6
5	5	10
10	10	21

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

**Calculated on basis of deodorized kerosene

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 other insecticides), ants, crickets, firebrats, silverfish, spiders and stored product insects such as confused flour beetles, saw-toothed grain beetles, Indian meal moths, rice weevils, Mediterranean flour moths and red flour beetles. Apply as a coarse, low pressure (20 psi or less)

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spray to localized areas where cockroaches are suspected or are suspected of hiding or entering. Thoroughly spray the surfaces treated with the spray 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 but 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), DURSBAN 2E 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 a 0.5% spray only. Note: A period of 4 to 7 days is normally required for maximum effect on cockroaches.

For control of carpet beetles, thoroughly apply 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.

Attention (Pests Indoors): Do not apply water-base sprays of this product in conduits, motor housings, junction and switch boxes or other electrical equipment because of possible fire hazard. If there is need to treat these areas use only oil-base sprays. Prior to application de-energize electric equipment. After application allow time for oil to evaporate before start

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Apply the insecticide Dursban 2E to flowering trees and shrubs of the Genus Prunus, Peach Tree Borer, 1st and 2nd year and bloodchamber borer. Apply Dursban 2E to the trunks and scaffold limbs of trees and shrubs when the insects 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 Dursban 2E in 100 gallons of water and apply uniformly as a coarse, low pressure spray.

DOSAGES and DIRECTIONS for USE on TURF

	Dosage DURSBAN 2E per 1000 sq. ft.	Remarks
Ants	1-1/2* fl. oz.	Spray when pests first appear, repeat when needed. For sod webworms delay watering or mowing the treated area for 12 to 24 hours after treatment.
Armyworms		
Chiggers		
Chinch bugs		
Clover mite		
Crickets		
Cutworms		
Earwigs		
Fleas		
Grasshoppers		
Sod webworms		
Termites		
Tree weevil (Hyperodes)	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 (Including European chafer, southern masked chafer and Japanese beetle larvae)	3 to 6 fl. oz.	
Bluegrass billbug	3 to 6 fl. oz.	Spray early in the season when adults first appear. Repeat when needed.

*1-1/2 fl. oz. per 1000 sq. ft.=7-1/2 fl. oz. per 5000 sq. ft.=1 pint per 10,700 sq. ft.=2 quarts per acre.

Peach Tree Borer. Apply DURSBAN 2E 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 on exposure of treated areas to weathering conditions.

Attention (Lawn and Ornamental Plant Pests): Keep children and pets off treated areas until spray has dried. Keep out of lawn and garden fountains and other bodies of water.

Native Elm Bark Beetle. **Prevention of Overwintering.** To prevent the adult beetle from overwintering in uninfected trees and to reduce beetle population in disease free areas, apply DURSBAN 2E insecticide as a 0.5% mixture of chlorpyrifos in water to the bottom 9 feet of trunk. Wet the trunk thoroughly 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 backpack 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.

Area Control of Ticks and Chiggers: Use DURSBAN 2E insecticide to control ticks and chiggers infesting non-cropland areas such as roadsides, footpath 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 DURSBAN 2E 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 underbrush, grassy areas, weeds, and ground surface and debris using enough spray volume to obtain thorough coverage, usually 40 to 100 gallons per acre.

Attention (Area Control of Ticks and Chiggers): Do not allow public use of treated areas during application or until spray has dried.

Imported Fire Ant: **Treatment of potted, containerized and balled and burlapped nursery stock.** Use DURSBAN 2E to control imported fire ants in soil attached to roots of these plants by completely submerging the ball of soil in a tank containing DURSBAN 2E diluted at the rate of 8 fl. oz. per 100 gallons of water. Do not remove burlap wrap or plastic containers with drain holes prior to submerging. Keep soil submerged until complete saturation has occurred, normally about 30 seconds. Wear rubber gloves, boots and apron during this operation. An alternate treatment to submerging potted plants is to apply a solution containing DURSBAN 2E (8 oz. per 100 gallon of water) as a substitute for plain water during routine watering activities. This solution should be applied to the point of run-off on a twice daily schedule for three consecutive days. Do not remove burlap wrap or container from plants prior to treatment. Application should be made in a well-ventilated area.

Treatment of fire ant mounds. Apply DURSBAN 2E as a drench diluted at the rate of 1 fl. oz. (30cc) 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 ft. diameter (12 sq. ft.). For best results apply in cool weather, 65-80°F.

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DIRECTIONS FOR USE (cont.)

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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

		Amount of DURSBAN 2E in Water to Make		
Pests Controlled		3 gallons	10 gallons	100 gallons
Aphids Bagworms Eastern tent caterpillar Fall webworm Grasshoppers	Mites	0.5 fl. Oz.	1.6 fl. Oz.	1 pint
	Orangestriped oakworm			
	Spittlebugs			
	Whiteflies			
	Yellownecked caterpillar			
Cutworms Leafhoppers Mealybugs	Mimosa webworm	1.0 fl. oz.	3.2 fl. oz.	1 quart**
	Redhumped caterpillar			
	Thrips (exposed)			
Ash borer Boxwood borer Lilac borer Rhododendron borer	Scale crawlers	2.0 fl. oz.	6.4 fl. oz.	2 quarts***
	Oak lecanium			
	Pine needle			
	Tea			
	Winter peach			
Peach tree borer		5.8 fl. oz.	19.2 fl. oz.	6 quarts****

*Equivalent to 4 ounces of chlorpyrifos per 100 gallons.

**Equivalent to 8 ounces of chlorpyrifos per 100 gallons.

***Equivalent to 1 pound of chlorpyrifos per 100 gallons.

****Equivalent to 3 pounds of chlorpyrifos per 100 gallons.

Mosquitoes: Apply DURSBAN 2E insecticide to mosquito infested, non-crop areas according to the conditions and rates shown in the following table.
Mix DURSBAN 2E 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.

Warning (Mosquito Control): Read complete Environmental and Use Precautions and consult your State Fish and Game Department before using this product for mosquito control.

Waste Water (High in Organic Content) - Use DURSBAN 2E insecticide for control of mosquito larvae in agricultural, industrial, and urban waste waters that contain high levels of organic matter, including sewage drains, ponds and lagoons; industrial waste water impoundments; cesspools and septic

not use only in logging ponds, standing water, temporary rain pools, intermittently flooded areas, stagnant water and similar non-crop areas that serve as mosquito breeding sites. Shrimp and crab may be killed at application rates recommended on this label. Do not apply to water used for irrigational, recreational or domestic uses.

Area to be Treated	Dosage of DURSBAN 2E	Use Directions
Sewage drains Waste disposal ponds and lagoons Industrial waste water impoundments	2 fl. oz. per 5000 cu. ft. of water or 8.7 fl. oz. per acre foot of water*	Pour the required amount of undiluted DURSBAN 2E into the inflowing water or apply to the water surface as a coarse, low pressure spray. Treat stagnant waters by diluting DURSBAN 2E with sufficient water or oil to obtain uniform distribution
Cesspools Septic tanks	2 fl. oz. per 1000 cu. ft. of water	Apply directly or flush the required amount down a toilet
Catch basins	0.08 fl. oz. per catch basin	Dilute 4 fl. oz. of DURSBAN 2E with 3 gallons of water to make 0.25% chlorpyrifos spray and apply 1/2 pint of mixture per catch basin as coarse, low pressure spray. Uniformly cover the exposed walls (sides) of the basin and the water surface

*Equivalent to 0.1 part per million of chlorpyrifos in the total volume of water treated.

CONDITIONS and RATES to USE for MOSQUITO CONTROL

Condition of Area to be Treated	Amount to Use per Acre		Number Acres 1 Gallon of DURSBAN 2E Will Treat
	DURSBAN 2E (fluid ounces)	Chlorpyrifos (pounds)	
Larval Control None to medium vegetative cover	0.8 to 1.6	0.0125 to 0.025	160 to 80
Medium to heavy vegetative cover	1.6 to 3.2*	0.025 to 0.05*	80 to 40
Adult Control Light to medium vegetative cover	1.6	0.025	80
Medium to heavy vegetative cover	3.2*	0.05*	40

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

100-100-100-100-100
Hazardous to Humans

WARNING: CAN BE FATAL IF SWALLOWED MAY BE ABSORBED THROUGH SKIN MAY BE INJURIOUS TO EYES AND SKIN Do Not Take Internally-Do Not Get in Eyes or on Skin-Flush Thoroughly After Handling-Wash Contaminated Clothing Before Reuse-Flush Contaminated Eyes with Plenty of Water and Get Prompt Medical Attention-Avoid Breathing Vapors and Spray Mist-Avoid Spraying Food Crops-Keep Away from Food, Feedstuffs, and Domestic Water Supplies-Keep concentrated in a Ventilated Area

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish, birds and other wildlife. Fish and other aquatic organisms may be killed at application rates recommended on the label. Consult your State Fish and Game Agency before applying this product to determine this product's impact on aquatic life forms. Cover or incorporate spills while loading. Do not contaminate water by cleaning of equipment or disposal of wastes.

Physical or Chemical Hazards

COMBUSTIBLE: Do Not Use or Store Near Heat or Open Flame-Do Not Cut or Weld Container

STORAGE AND DISPOSAL

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

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 approved state and local procedures.

General: Consult federal, state or local disposal authorities for approved alternative procedures.

NOTICE: Buyer assumes all risk and liability of use, storage and/or handling of this material not in accordance with the terms of this label