



**COMPANY
NUMBER** 10370-

**PRODUCT
SERIAL NO.** 65

**LABEL
APPROVAL
DATE** 8 28 84

DURSBAN® 4E

INSECTICIDE

CONTROLS PESTS OF HOUSEHOLD (cockroaches, ants, brown dog ticks, silverfish, spiders), **TRIF** (chinch bugs, sod webworms, ants, brown dog ticks, cutworms, earwigs, crickets, grasshoppers, certain white grubs, hyperodes weevil) **AND ORNAMENTAL PLANTS** (aphids, bagworms, grasshoppers, leafhoppers, spittlebugs, mealybugs, whiteflies, exposed thrips, mites, cutworms). **ALSO RECOMMENDED FOR MOSQUITO CONTROL AND AREA CONTROL OF TICKS.**

To be applied only by or under the supervision of Pest Control Operators and other Trained Personnel responsible for Insect Control Programs

ACTIVE INGREDIENTS:

Chlorpyrifos [0,0-diethyl 0-(3,5,6-trichloro-2-pyridyl) Phosphorothioate]
Aromatic Petroleum Distillate

INERT INGREDIENTS:

Total

CONTAINS 4 LBS CHLORPYRIFOS PER GALLON
DURSBAN® — Trademark of The Dow Chemical Company

44.3%
46.3%
8.0%
100.0%
EPA Patent No. 3,244,580
AUG 28 1984
10370-65

KEEP OUT OF REACH OF CHILDREN WARNING STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Do not induce vomiting. Contains aromatic petroleum solvent. Call a physician immediately. **IF ON SKIN:** Wash thoroughly with soap and warm water. **IF IN EYES:** Flush eyes with plenty of water. Call a physician if irritation persists. **NOTE TO PHYSICIAN:** Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically, atropine is an antidote. 2-PAM is also antidotal and may be administered in conjunction with atropine.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds and other wildlife. Do not apply directly to water. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Apply this product only as specified on this label. This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service.

PHYSICAL AND CHEMICAL HAZARDS

Keep container closed. DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME. Handle concentrate in a ventilated area.

EPA Est. No. 10370-TX-1 NET CONTENTS: ONE GALLON

Manufactured By

Dow's Chemical & Service, Inc.

2739 PASADENA BLVD.
PASADENA TEXAS 77502

EPA Reg. No. 10370-01

STORAGE AND

Preparation, spray mixture or residue should be kept in original container until it is no longer needed for use. Do not use in areas where it may be harmful to plants or animals. Do not use in areas where it may be harmful to humans or animals. Do not use in areas where it may be harmful to the environment.

USE DIRECTIONS

1. To a maximum of 1 gallon per 1000 sq ft of area. Use only as directed. Do not use in areas where it may be harmful to humans or animals. Do not use in areas where it may be harmful to the environment. Do not use in areas where it may be harmful to plants or animals. Do not use in areas where it may be harmful to humans or animals. Do not use in areas where it may be harmful to the environment.

Volume of Spray Mixture (gallons)	Flow Rate (gpm)
Water-base spray	
1	0.5
3	1.5
5	2.5
10	5.0
Oil-base spray**	
1	0.5
3	1.5
5	2.5
10	5.0

Note: 1 fluid ounce = 2.95735 centiliters. *Calculated on basis of 1 gallon. NOTE: Where quick knockdown is desired, dichlorvos (DDVP) or pyrethrin mixture. For best results, use dichlorvos in both water and oil-base sprays. Use 0.5% in oil-base spray or pyrethrin product used to give the desired spray concentration and handling precautions for the COCKROACHES (including Oriental cockroach), CRICKETS, FIRE ANTS, etc. 0.25% control light infestations; heavy infestations. FOR SPOT TREATMENT or with a paint brush to localized or normally occur, including cracks and crevices in walls, baseboards and behind sinks, stoves, refrigerators and other utility installations.

CONTINUED FROM SIDE PANEL

around doors and windows and wherever else these pests may find entrance. Note: A period of 4 to 7 days is normally required for maximum effect on cockroaches. **FOR CRACK AND CREVICE TREATMENT** carefully apply the spray into localized openings that are or may become harborage and entries for insect pests. Such openings commonly occur at expansion joints, between different elements of construction, and between equipment and floors. These openings may lead to voids such as hollow walls, equipment legs and bases, conduits, motor housings, junction or switch boxes. Make the treatment using low pressure (20 psi or less) and a straight (pin) stream or coarse fan nozzle so as to avoid possible atomization or splashing of the spray. Apply only one light spray to thoroughly cover the concealed (shaded) surfaces of the openings treated, using particular care to avoid runoff and unnecessary contamination of exposed surfaces of floors, walls and equipment. Do not allow the spray to contact food or food-contacting surfaces. Prior to application de-energize electrical equipment. After application allow time for oil to evaporate before starting motors or placing switches in the ON position. **APPLICATIONS OF THIS PRODUCT IN THE FOOD AREAS OF FOOD HANDLING ESTABLISHMENTS. OTHER THAN CRACK AND CREVICE TREATMENT ARE NOT PERMITTED. FOR CONTROL OF FLEAS AND BROWN DOG TICKS**, thoroughly apply a 0.5% spray as a spot treatment of infested areas such as pet beds and resting quarters, nearby cracks and crevices, along and behind baseboards, window sills, 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**

WARNING

WARNING (PESTS INDOORS): Do not allow children or pets to contact treated surfaces until spray has dried. Remove pets and cover fish bowls (tanks) before spraying. Do not allow spray to contact food, feedstuffs, and water supplies. Thoroughly wash dishes and food handling utensils and surfaces with soap and water if they become contaminated by application of this product. **DO NOT USE DURSBAN 4E FOR SPOT TREATMENT** in poultry houses, other animal buildings, or in edible products areas of food processing plants, restaurants, or other areas where food is commercially prepared and processed. Do not use in serving areas while food is exposed.

PESTS OUT-OF-DOORS: General information: Use DURSBAN 4-E insecticide for control of certain pests of lawns and ornamental plants, for area control of ticks and for mosquito control. Consult the following directions for dosage and application details to control the pests listed.

PESTS OF LAWNS AND OTHER ORNAMENTAL AND RECREATIONAL TURF GRASS AREAS: Use DURSBAN 4-E insecticide to control ants, brown dog ticks, chinch bugs, crickets, cutworms, earwigs, grasshoppers and sod webworms (lawn moths). Mix DURSBAN 4-E with water according to directions given in the following table and apply as a coarse, low-pressure spray using suitable application equipment. For best results, the lawn should be moist at time of treatment, and care should be taken to obtain complete and uniform coverage of pest infested areas. Spray when pests first appear; retreat when needed.

DOSES AND DILUTIONS for USE on TURF

Area to be Treated	Amount of DURSBAN 4-E	Dilute with Water to Give
500 sq. ft.	3/8 fl. oz.	15 gallons
1,000 sq. ft.	3/4 fl. oz.	30 gallons
5,000 sq. ft.	3-3/4 fl. oz.	150 gallons

DOSE AND DILUTIONS FOR USE ON TURF

Area to be Treated	Amount of DURSBAN 4-E	Dilute with Water to Give
10,700 sq. ft. one acre	1/2 pint 1 quart	325 gallons 1,300 gallons

TO CONTROL CERTAIN WHITE GRASS (varies of European choler and Japanese beetle) use two to four times the amount of DURSBAN 4E shown in the TURF table, i.e. 1 1/4 to 3 fl. oz. per 1,000 sq. ft. or 1/2 to 1 gallon per acre. Apply in enough water to obtain uniform coverage of the area treated followed by thorough watering to wash the insecticide into the turf. For best results treat when grubs are young and actively feeding near the soil surface, usually during late July and August. Consult your local Agricultural Extension Service specialist for proper time to treat in your area.

TO CONTROL TURFGRASS (HYPERODES) WEEVILS use twice the amount of DURSBAN 4E shown in the above TURF table, i.e., 1 gallon dilute 1 in 1,300 gallons of water per acre. Spray suspected problem areas in mid-April and again in mid-May. Consult your local Agricultural Extension Service specialist for proper time to treat in your area.

NOTE: To help prevent infestation of buildings by ants, crickets, earwigs and sawbugs (pillbugs), treat a band of soil 6 to 10 feet wide around and adjacent to the building, also the building foundation to a height of 2 to 3 feet, where pests are active and may find entrance. Use the same dosage and dilution recommended for control of these pests on turf as shown in the above table. Apply as a coarse spray to thoroughly and uniformly wet the band area.

PESTS OF ORNAMENTALS: Use DURSBAN 4E to control aphids, beetworms, cutworms, grasshoppers, leafhoppers, mealybugs, mites, millbugs, thrips (exposed) and whiteflies on flowers, shrubs, vines, shade and flowering trees and evergreens found to be infested with these pests. Dilute DURSBAN 4E with water according to directions given in the following table and apply using suitable hand or power spray equipment in a manner to provide complete and uniform coverage of infested plants. Avoid over-spraying to the point of excessive runoff. Treat when pests appear and repeat at 7 to 10 day intervals, if needed. **NOTE:** Do not use on azaleas, camellias, poinsettias, rose bushes or variegated ivy because of possible injury to these plants.

DOSES AND DILUTIONS for USE on ORNAMENTAL PLANTS

Pests Controlled	Amount of DURSBAN 4-E in Water to Make		
	3 gallons	10 gallons	100 gallons
Aphids, Bagworms, Grasshoppers, Mites, Spittlebugs, Whiteflies	0.25 fl. oz.	.8 fl. oz.	1/2 pint*
Cutworms, Mealybugs, Leafhoppers, Thrips (Exposed)	.5 fl. oz.	1.6 fl. oz.	1 pint*

*Equivalent to 4 ounces of chlorpyrifos per 100 gallons

**Equivalent to 8 ounces of chlorpyrifos per 100 gallons

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.

WARNING (LAWN AND ORNAMENTAL PLANT PESTS): Keep children and pets off treated areas until spray has dried. Keep out of lawn and garden fish-pools and other bodies of water. Fish may be killed if their waters are contaminated with this product. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

AREA CONTROL OF TICKS: Use DURSBAN 4E to control ticks infesting non-crop land 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 health problem. Apply DURSBAN 4E 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 under-brush, grassy areas, weeds and ground surface and debris using enough spray volume to obtain thorough coverage, usually 40 to 100 gals. per acre.

WARNING (AREA CONTROL OF TICKS): Do not allow public use of treated areas during application or until spray has dried. Do not apply when weather conditions favor drift from treated areas. Do not apply where runoff into lakes, streams, ponds or other bodies of water is likely to occur. Fish and crustaceans may be killed if their waters are contaminated with this product.

MOSQUITOS: Apply DURSBAN 4E to mosquito infested non-crop areas according to the conditions and rates shown in the following table. Mix DURSBAN 4E 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.

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 4E will treat
	DURSBAN 4E (fluid ounces)	Chlorpyrifos (pounds)	
Larval Control - None to medium vegetative cover	0.4 to 0.8	0.125 to 0.025	160 to 80
Larval Control - Medium to heavy vegetative cover	0.8 to 1.6*	0.025 to 0.005*	80 to 40
Adult Control - Light to medium vegetative cover	0.8	0.025	80
Adult Control - Medium to heavy vegetative cover	1.6*	0.105*	40