

6720-59

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CENTER PANEL

ACCEPTED
JUL 26 1974
 UNDER THE FEDERAL INSECTICIDE
 FUNGICIDE AND RODENTICIDE ACT
 FOR ECONOMIC POISON REGISTER-
 ED UNDER NO. 6720-59 SUBJECT
 TO ATTACHED COMMENTS.

Best Available Copy



DURSBAN* 2E

INSECTICIDE

Controls Pests of Households (Cockroaches, Ants, Brown Dog Ticks, Silverfish, Spiders), Turf (Chinch Bugs, Sod Webworms, Ants, Brown Dog Ticks, Cutworms, Earwigs, Crickets, Grasshoppers, Hyperodes Weevil) and Ornamental Plants (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, Public Health Organization, Mosquito Abatement Districts and Other Trained Personnel Responsible for Insect Control Programs

ACTIVE INGREDIENTS:	
Chlorpyrifos (O, O-diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate).....	23.5%
Aromatic petroleum derivative solvent.....	14.9%
Xylene.....	54.9%
INERT INGREDIENTS:	6.7%
TOTAL	100.0%

Contains 2 pounds of chlorpyrifos per gallon
 E.P.A. Registration No. 6720-59

WARNING: KEEP OUT OF REACH OF CHILDREN

SEE SIDE PANEL FOR OTHER CAUTIONS

NET CONTENTS:

U.S. Patent No. 3244,586
 *DURSBAN - Trademark of the DOW CHEMICAL COMPANY

MANUFACTURED BY
 DOW CHEMICAL COMPANY



USE DIRECTIONS

PESTS INDOORS: General Information: Use DURSBAN 2E insecticide as a spot treatment to control cockroaches, ants, crickets, firebrats, silverfish, spiders and brown dog ticks in and around residential, institutional and commercial buildings including homes, apartment buildings, hospitals, stores and warehouses. Dilute DURSBAN 2E with water or with a suitable base oil to make a 0.25% or 0.5% chlorpyrifos spray as shown in the following **SPRAY DILUTION CHART**. Apply according to directions given for pests listed. Repeat the treatment as needed.

SPRAY DILUTION CHART

Gallons of Spray Mixture Desired	Fluid Ounces of DURSBAN 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-base spray**:		
1	1	2
3	3	6
5	5	10
10	10	21

* Note 1 fluid ounce - 2 tablespoons - 6 teaspoons
 ** Calculated on basis of deodorized kerosene

COCKROACHES

(INCLUDING STRAINS RESISTANT TO CERTAIN OTHER INSECTICIDES), ANTS, CRICKETS, FIREBRATS, SILVERFISH, SPIDERS: Use a 0.25% spray to control light infestations and a 0.5% spray to quickly reduce heavy infestations.

Note: Where quick "knockdown" and/or "flushing action" is desired, dichlorvos (DDVP) or pyrethrins may be added to the spray mixture containing DURSBAN 2E insecticide. For best results, use dichlorvos at a concentration of 0.25% in both water and oil-base sprays; use pyrethrins at 0.25% in water-base and 0.05% in 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.

Application in Non-Food Areas:

Apply as a coarse spray or with a paint brush to localized areas where these pests 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. Note: A period of 4 to 7 days is normally required for maximum effect on cockroaches.

Applications Within Food Areas of Food Handling Establishments:

Limited to Crack and Crevice Treatment Only - Apply a small amount of material directly into cracks and crevices such as expansion joints between different elements of construction or between equipment bases and the floor, wall voids, motor housing, junction boxes, or hollow equipment legs where cockroaches hide. Care should be taken to avoid depositing the product onto exposed surfaces or introducing the material into the air. Avoid contamination of food or food processing surfaces. Equipment that can deliver a pin stream of insecticide must be used.

APPLICATIONS OF THIS PRODUCT IN THE FOOD AREAS OF FOOD HANDLING ESTABLISHMENTS, OTHER THAN AS A CRACK AND CREVICE TREATMENT, ARE NOT PERMITTED.

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.

Warning (Pests Indoors): For Spot Application Only. Do not use in poultry houses, other animal buildings. Do not allow children or pets to contact treated surfaces until spray has dried. Remove pets and cover fish bowls (tanks) before spraying.

PESTS OUT-OF-DOORS: General Information: Use DURSBAN 2E 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.

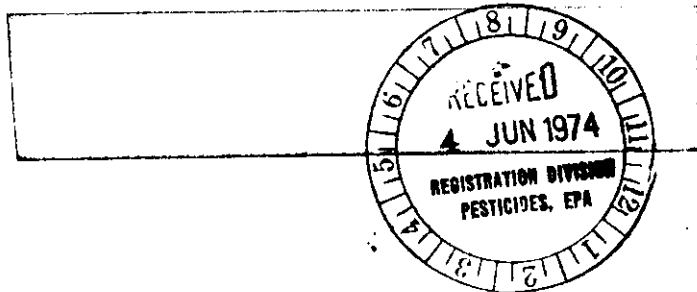
Pests of Lawns and other Ornamental and Recreational Turf Grass Areas: Use DURSBAN 2E insecticide to control ants, brown dog ticks, chinch bugs, crickets, cutworms, earwigs, grasshoppers and sod webworms (lawn moths). Mix DURSBAN 2E with water according to directions given in the following table and 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; repeat when needed.

DOSAGE and DILUTIONS for USE on TURF

Area to be Treated	Amount of DURSBAN 2E	Dilute with Water to Give
500 sq. ft.	3/4 fl. oz.	15 gallons
1,000 sq. ft.	1-1/2 fl. oz.	30 gallons
5,000 sq. ft.	7-1/2 fl. oz.	150 gallons
10,700 sq. ft.	1 pint	325 gallons
One Acre	2 quarts	1,300 gallons

To control turfgrass (Hyperodes) weevils use twice the amount of DURSBAN 2E shown in the above TURF table, i.e. 1 gallon diluted 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 sowbugs (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 2E to control bagworms, cutworms, grasshoppers, leafhoppers, mealybugs, mites, spitbugs, thrips (exposed) and whiteflies on flowers, shrubs, vines, shade and flowering trees and evergreens found to be infested with these pests. Dilute DURSBAN 2E 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 overspraying 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, camelias, poinsettias, rose bushes or variegated ivy because of possible injury to these plants.

DOSAGE and DILUTIONS for USE on ORNAMENTAL PLANTS

Pests Controlled	Amount of DURSBAN 2E in Water to Make		
	3 gallons	10 gallons	100 gallons
Bagworms Grasshoppers Mites Mealybugs Whiteflies	0.5 fl. oz.	1.6 fl. oz.	1 pint*
Cutworms Mealybugs Leafhoppers Thrips (exposed)	1 fl. oz.	3.2 fl. oz.	1 quart**

*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.

Area Control of Ticks: Use DURSBAN 2E to control ticks in non-crop land areas such as roadsides, footpaths and near 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 fluid ounce 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 ceons using enough spray volume to obtain thorough coverage, usually 40 to 100 gallons per acre.

Mosquitoes: Apply DURSBAN 2E 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.

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 vegetable cover	0.8 to 1.6	0.0125 to 0.025	160 to 80
Medium to heavy vegetable cover	1.6 to 3.2*	0.025 to 0.05*	80 to 40
Adult Control Light to medium vegetable cover	1.6	0.025	80
Medium to heavy vegetable 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.

Warning (Mosquito Control): DURSBAN 2E is toxic to shrimp, crabs and fish. Do not apply to water containing crustaceans and fish. Consult your State Fish and Game Department before using this product for mosquito control.

WARNING

KEEP OUT OF REACH OF CHILDREN
 MAY BE FATAL IF SWALLOWED . MAY BE ABSORBED THROUGH SKIN . MAY BE INJURIOUS TO EYES AND SKIN . COMBUSTIBLE

Do not take internally. Do not get in eyes or on skin. Wash thoroughly after handling. Wash contaminated clothing before re-use. 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 children and pets off treated areas until this material is washed into the soil and grass is dry. Keep container closed. DO NOT USE, POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME. Handle concentrate in a ventilated area.

NOTE TO PHYSICIAN: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. Atropine is an antidote.

GENERAL USE PRECAUTIONS

This product is highly toxic to bees exposed to direct treatment or residues on plants. Protective information may be obtained from your Cooperative Agricultural Extension Service.

PROTECT WILDLIFE: This product is toxic to fish, birds, and other wildlife. Keep out of lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where these are important resources. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

Do not reuse container. Destroy when empty. Promptly crush empty containers and bury them and wastes in locations away from domestic water supplies.

Notice: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.
 EPA Est. 6720-FL-1

