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US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (15-767) WASHINGTON DC 20460	EPA REGISTRATION NO.	DATE OF ISSUANCE
	TERM OF ISSUANCE	
	NAME OF PESTICIDE PRODUCT	

NOTICE OF PESTICIDE: REGISTRATION
 REREISTRATION
*(Under the Federal Insecticide, Fungicide
 and Rodenticide Act as amended)*

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

[Faint, illegible text]

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 in 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 indorsement or approval of this product by this 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.

1. Submit the data required for registration of your product under FIFRA section 101(a)(2) if the Agency requires all registrants of similar products to submit new data.
2. Add the phrase "EPA Registration No. 112" to your label before you release the product for shipment.
3. A 1-year storage stability study for this product must be submitted within 15 months from the date of registration.
4. Submit five (5) copies of your final printed label before you release the product for shipment. Refer to the Agency for a further description of the printed label.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL	DATE
<i>De... H. Edwards</i>	6/1/89

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If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 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.

Dennis H. Edwards, Jr.
Product Manager (12)
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Enclosures

2,010

**SPRAY-CHEM
DURBAN® CONCENTRATE**

**INFORMATION & DIRECTIONS
PAMPHLET**

**PEST CONTROL INSECTICIDE
INSIDE & OUTSIDE**

**ROACHES, FLEAS, TICKS
Fire Ants, Mosquitoes
&
Many Other Insects**

**SMITH DISTRIBUTORS, INC.
2742 Shadowdale
Houston, Texas 77043**

420 c

SPRAY-CHEM

DURSBAN® CONCENTRATE

Makes 1 gal. of Indoor & Outdoor Insecticide

Kills Roaches, Fleas, Ticks, Fire Ants, Mosquitoes, & Many Other Insects

To Be Applied Only By or Under the Supervision of Pest Control Operators or other Trained Personnel Responsible for Insect Control Programs.

WARNING: KEEP OUT OF REACH OF CHILDREN
See Back Panel For Additional Precautionary Statements

ACTIVE INGREDIENTS:

Chlorpyrifos (0,0-diethyl 0-(3,5,6-trichloro-2-pyridyl)

phosphorothioate 12.6%

INERT INGREDIENTS:..... 87.4%

Contains 1 pound Chlorpyrifos per gallon

"Dursban®" - Trademark of The Dow Chemical Company

Contains xylene range aromatic solvent.

E.P.A. ACC. No. 34901-3725

E.P.A. Est. 34901-TX-001

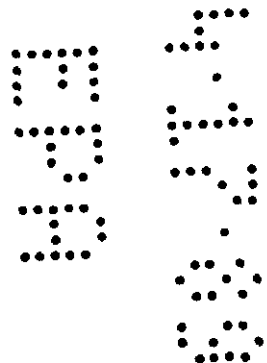
NET CONTENTS: 5.33 OZ.

ACCEPTED
with **COMMENTS**
in EPA Letter Dated

JUN - 1 1980

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

34901-4



5-11

(BACK OF LABEL)

PRECAUTIONARY STATEMENTS

Hazards to Humans - Causes Eye Irritation - Harmful If Swallowed

Do not take internally. Do not get in eyes, on skin or clothing. Wash contaminated clothing before reuse. Avoid breathing vapors and spray mist. Avoid spraying food crops. Keep away from food, feedstuffs, and domestic water supplies. Keep container closed. Handle concentrate in a ventilated area.

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 plenty of soap and water. **If In Eyes:** Flush eyes with plenty of water. Call a physician.

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

PHYSICAL OR CHEMICAL HAZARDS

COMBUSTIBLE - Do not use or store near heat or open flame. Do not cut or weld container.

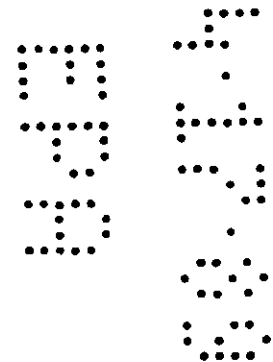
**SEE ATTACHED BOOKLET FOR ADDITIONAL PRECAUTIONS
AGRICULTURAL CHEMICAL**

Do not ship or store with food, feed, drugs or clothing.

READ ATTACHED BOOKLET COMPLETELY BEFORE USING THIS PRODUCT

MANUFACTURED BY:

**SMITH DISTRIBUTORS, INC.
2742 Shadowdale
Houston, Texas 77043**



PRECAUTIONARY STATEMENTS
ENVIRONMENTAL HAZARDS

SPRAY-CHEM DURSBAN® CONCENTRATE is toxic to fish, birds, and other wildlife. Do not apply directly to lakes, streams or ponds. Shrimp and crabs may be killed at application rates recommended on this label. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label. 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.

PRECAUCION Al Usuario: Si usted no lee ingles, no use esta producto hasta que la etiqueta he haya sido explicada ampliamente. **TRANSLATION:** (TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

USE DIRECTIONS

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

PEST INDOORS

General information: Use SPRAY-CHEM DURSBAN® CONCENTRATE 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 SPRAY-CHEM DURSBAN® CONCENTRATE with water as shown in the following SPRAY DILUTION CHART. Repeat the treatment as needed.

SPRAY DILUTION CHART

GALS. OF SPRAY MIXTURE DESIRED	FL. OZ. OF SPRAY-CHEM DURSBAN® CONCENTRATE TO USE	
	0.25% SPRAY	0.50% SPRAY
WATER-BASE SPRAY		
1	3	5-1/3
3	8	16
5	13-1/3	27
10	27	54

NOTE: 1 fluid ounce = 2 tablespoonfuls

NOTE: Where quick "knockdown" and/or "flushing action" is desired, pyrethrins may be added to the spray mixture containing SPRAY-CHEM DURSBAN® CONCENTRATE. 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. Do not use SPRAY-CHEM DURSBAN® CONCENTRATE in combination with pyrethrins for treatment of food areas of food handling establishments.

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 installments. 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.

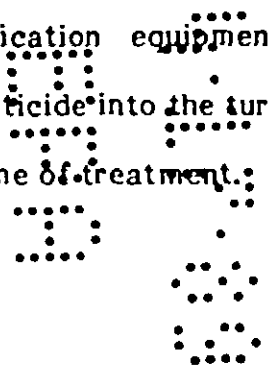
For control of carpet beetles: Thoroughly apply an 0.5% spray as a spot treatment along baseboards and edges of carpeting, under carpeting, rugs and furniture, in closets and on shelving, and wherever else these insects are seen or suspected. **For control of fleas and brown dog ticks:** Thoroughly apply an 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 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.** To control the source of flea infestation, pets inhabiting the treated premises should be treated with a product registered for application to animals.

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 shock hazard. Do not use in poultry houses or other animal buildings. 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 fishbowls (tanks) before spraying.

PESTS OUT-OF-DOORS: General Information: Use **SPRAY-CHEM DURSBAK®** CONCENTRATE for control of certain pests on outside surfaces of buildings and on lawns and ornamental plants, for area control of ticks and chiggers and for mosquito control. Consult the following directions for dosage and application details to control the pests listed.

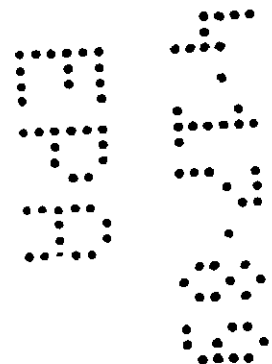
Pests on outside surfaces of buildings: Use SPRAY-CHEM DURSBAN® CONCENTRATE at the rate of 5-1/3 fluid ounces per one gallon of water (0.5% chlorpyrifos emulsion) to control ants, clover mites, cockroaches, crickets, earwigs, fleas, flies, millipedes, mosquitoes, sowbugs, spiders and ticks by application 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, but not more often than once every 7 days. **NOTE:** To help prevent infestation of buildings by ants, crickets, earwigs, millipedes, and sowbugs (pillbugs), treat a band of soil 6 to 10 feet wide around and adjacent to the building foundation to a height of 2 to 3 feet, where pests are active and may find entrance. Use 2 pints of SPRAY-CHEM DURSBAN® CONCENTRATE per 100 gallons of water and apply as a coarse spray at the rate of about 10 gallons spray mixture per 1000 sq. ft. to thoroughly and uniformly wet the band area.

Pests of lawns and other ornamental and recreational turf grass areas: Use SPRAY-CHEM DURSBAN® CONCENTRATE to control pests listed in the following table by application at the recommended dosages and in accordance with the directions given below. Dilute SPRAY-CHEM DURSBAN® CONCENTRATE 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.

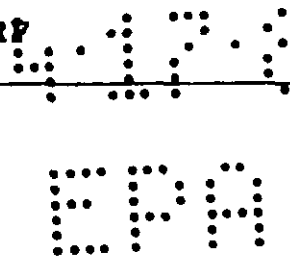


PESTS OF ORNAMENTALS: Use SPRAY-CHEM DURSBAN® CONCENTRATE to treat flowers, shrubs, vines, shade and flowering trees, and evergreens found to be infested with the pests listed in the table. Dilute SPRAY-CHEM DURSBAN® CONCENTRATE with water according to directions given in the table and apply using suitable 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 day intervals, if needed. NOTE: Do not use on azaleas, camellias, poinsettias, rose bushes, or variegated ivy because of possible injury to these plants.

Dogwood Borer: Apply SPRAY-CHEM DURSBAN® CONCENTRATE to the trunks and lower limbs of dogwood trees when the adults begin to emerge. Consult your State Agricultural Experimental Station or Extension Service specialist for proper time to treat in your area. Mix at the rate of one gallon of SPRAY-CHEM DURSBAN® CONCENTRATE in 100 gallons of water and apply uniformly on trees as a coarse, low-pressure spray.



DOSAGES AND DIRECTIONS FOR USE ON TURF



PESTS	DOSAGE SPRAY-CHEM DURSBAN ^(D) CONCENTRATE per 1000 sq. ft.	REMARKS
Ants, Armyworms, Brown Dog Ticks, Chiggers, Chinch Bugs, Clover Mites, Crickets, Cutworms, Earwigs, Fleas, Grasshoppers, Sod Webworms, Ticks	3 fl. oz.	Spray when pests first appear; retreat when new worms delay watering or mowing the treated area hours after treatment.
Turfgrass (Hyperodes) Weevil	6 fl. oz.	Spray suspected problem areas in mid-April and as recommended by your local Agricultural Extension specialist for your area.
White Grub: (European Chafer and Japanese Beetle larvae only)	6 to 12 fl. oz.	For white grubs, spray when grubs are young and near the soil surface, usually during late July and recommended by your local Agricultural Extension for your area. Immediately after spraying, irrigate with 1/2 to 1 inch of water to wash the insecticide underlying soil.
Bluegrass Billbug	6 to 12 fl. oz.	Spray early in the season when adults first appear 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.

DOSAGES AND DILUTIONS FOR USE ON ORNAMENTAL PLANTS:

Amount of SPRAY-CHEM DURBAN® CONC. In Water to Make

Pests Controlled	3 gallons	10 gallons	100 gallons
Aphids, Bagworms, Eastern Tent Caterpillar, Fall Webworm, Grasshoppers, Mites, Orangestripped Oakworm, Spittlebugs, Whiteflies, Yellownecked Caterpillar	1 fl. oz.	3.2 fl. oz.	2 pints*
Cutworms, Leafhoppers, Mealybugs, Mimosa Webworm, Redhumped Caterpillar, Thrips (Exposed)	2 fl. oz.	6.4 fl. oz.	2 quarts**
Ash Borer, Lilac Borer, Dogwood Borer, Scale Crawlers: Oak Lecanium, Pine Needle, Tea, White Perch	4 fl. oz.	12.8 fl. oz.	4 quarts***
Peach Tree Borer	11.6 fl. oz.	38.4 fl. oz.	12 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

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 fishpools 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 area, apply SPRAY-CHEM DURSBAN[®] CONCENTRATE as an 0.5% mixture of chlorpyrifos in water to the bottom 9 feet of the 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 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 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 SPRAY-CHEM DURSBAN[®] CONCENTRATE 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 SPRAY-CHEM DURSBAN® CONCENTRATE in water at the rate of 2 pints 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.

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 SPRAY-CHEM DURSBAN® CONCENTRATE to control imported fire ants in soil attached to roots of these plants by completely submerging the ball of the soil in a tank containing SPRAY-CHEM DURSBAN® CONCENTRATE diluted at the rate of 16 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.

Treatment of fire ant mounds: Apply SPRAY-CHEM DURSBAN® CONCENTRATE as a drench diluted at the rate of 2 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. 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.

MOSQUITOES: Apply SPRAY-CHEM DURSBAN® CONCENTRATE to mosquito-infested, non-crop areas according to the conditions and rates shown in

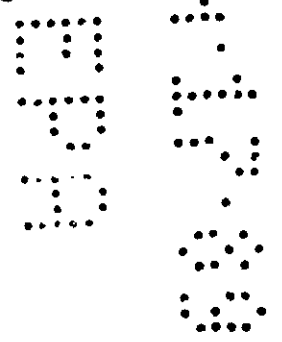
MOSQUITOES: Apply SPRAY-CHEM DURSBAN® CONCENTRATE to mosquito-infested, non-crop areas according to the conditions and rates shown in table. Mix SPRAY-CHEM DURSBAN® CONCENTRATE with water using sufficient spray volume to give uniform coverage of area treated. Apply the spray using suitable application 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.

Conditions and Rates to Use for Mosquito Control

Condition of Area To Be Treated	Amount To Use Per Acre		Number Acres 1 Gallon of Spray-Chem Dursban ^R Conc. will treat
	Spray-Chem Dursban ^R Conc. (fluid ounces)	Chlorpyrifos (pounds)	
Adult Control o Light to medium vegetative cover	3.2	0.05	80
Adult Control o medium to heavy vegetative cover	6.4	0.1	40

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



STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **Storage:** Store product in its original labeled container in a cool, dry, locked place out of reach of children. **Disposal:** Do not re-use empty bottle. Wrap and put in trash.

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.