

MAR 16 1989

Mr. Harry C. Davis, Jr.
Louisiana Chemical Company
8993 Airline Highway
Baton Rouge, LA 70815

Dear Mr. Davis:

Subject: Davis Kill-A-Bug XI
EPA Registration No. 11746-15
Your Application Dated October 21, 1988

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Replace your service persons restricted use statement with:

To Be Applied Only by or Under the Direct Supervision of Commercial Applicators Responsible for Insect Control Programs.

3. Submit five (5) copies of your final printed labeling before you release the product for shipment.

50394:I:Edwards:E-4:KENCO:3/14/89:3/24/89:AS:VO:SG:AS

CONCURRENCES

SYMBOL								
SURNAME								
DATE								

1 of 5

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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 bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,

Dennis H. Edwards, Jr.
Product Manager (12)
Insecticide-Rodenticide Branch
Registration Division (H7504C)

Enclosure

INDOOR • OUTDOOR • INDOOR • OUTDOOR • INDOOR • OUTDOOR

indicate degree of exposure (baseline data are useful). Atropine, only by injection is the preferable antidote. Oximes, such as 2-PAM (pralidoxime) may be therapeutic if used early. However, use only in conjunction with atropine. In case of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration.

Physical or Chemical Hazards:

Combustible • Do Not Use or Store Near Heat or Open Flame. Do Not Cut or Weld Container.

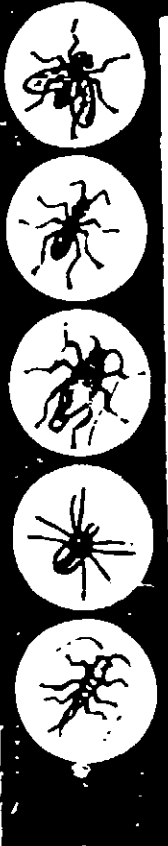
Environmental Hazards:

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. This product is toxic to fish, birds and other wildlife. Do not apply directly to water. Shrimp and crabs may be killed at application rates recommended on this label. Do not apply where there are important resources. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes. **NOTICE:** Read the entire label. Use only according to label directions.

In case of an emergency endangering life or property involving this product, call collect 504-355-3287.

AGRICULTURAL CHEMICAL

Do Not Shop or Store with Food, Feed, Fertilizer or Clothing.



DAVIS XI
KILL-A-BUG®

INDOOR • OUTDOOR PEST CONTROL

Only for sale to Use and Storage by Servicemen

Kills: Roaches, Fleas, Imported Fire Ants, Mosquitoes, Bees, Chinchbugs, Ticks, Chiggers, and many other insects indoors and outdoors.

**KEEP OUT OF REACH OF CHILDREN
WARNING**

SEE ATTACHED PAMPHLET FOR ADDITIONAL
WARNING STATEMENTS

READ COMPLETE USE DIRECTIONS ON PAMPHLET

AVISO: PRECAUCION AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada en el idioma.

ACTIVE INGREDIENTS: Chlorpyrifos (0.0 Diethyl O (3,5,5-trichloro-2-pyridyl) phosphorothioate) 22.4%
Xylene range aromatic solvent 69.2%
INERT INGREDIENTS 8.4%

Contains 2 pounds Chlorpyrifos per gallon

MFG. BY LOUISIANA CHEMICAL U.S.A., INC.
6155 Evangeline Street, Baton Rouge, Louisiana 70805

1-800 BUG-FREE

EPA Registration No. 11746-15

Est. No. 11746-LA-1

NET CONTENTS 8 FL. OZS.

\$5.95



DIRECTIONS:

It is a violation of Federal law to use this product in a manner inconsistent with the label. See attached pamphlet for use.

PRECAUTIONARY

Hazards to Humans and Environment
WARNING

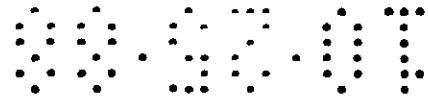
May be fatal if swallowed or absorbed through the skin. May cause eye injury. Do not get in eyes. Do not get on clothing. Wash thoroughly with soap and water after handling. Do not use on crops. Keep away from domestic water supply. Do not use in enclosed areas. Handle concealed areas.

STATEMENT OF PRACTICE

If Swallowed. Do not induce vomiting. If inhaled. Move to fresh air. If on skin. Wash immediately with soap and water. If on contaminated clothing. Wash with soap and water. If in eyes. Flush eyes with water. Call physician if irritation persists.

NOTE TO PHYSICIAN: Cholinesterase inhibitor. Treat symptoms with atropine and plasma and red blood cell transfusion.

BEST AVAILABLE COPY



ACCEPTED with COMMENTS in EPA Letter Dated

MAY 16 1989

For the Federal Insecticide, Fungicide, and Plant Disease Act as amended, for the pesticide registered under EPA Reg. No. 11746-15

3015

NOTE TO PHYSICIAN: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM, pralidoxime, may be therapeutic if used early, however, use only in conjunction with atropine. In case of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration.

Physical or Chemical Hazards

Combustible • Do not use or store near heat or open flame. Do not cut or weld container.

Environmental Hazards

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. This product is toxic to fish, birds and other wildlife. Do not apply directly to water. Shrimp and crabs may be killed at application rates recommended on this label. Do not apply where these are important resources. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes.

NOTICE: Read the entire label. Use only according to label directions.

Before buying this product, read "WARRANTY LIMITATIONS AND DISCLAIMER" elsewhere on this label. If terms are not acceptable, return unopened packages at once to seller for full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under the Limit of Warranty and Liability.

In case of an emergency endangering life or property involving this product, call collect 504-355-3207.

AGRICULTURAL CHEMICAL

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

DIRECTIONS FOR USE

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

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 oil* as shown in the following SPRAY DILUTION CHART. Repeat the treatment as needed.

* Use only deodorized kerosene or oil-based sprays 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 this product. For best results, use dichlorvos at a concentration of 0.25% in both water and oil-based 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. Mixtures of this product and dichlorvos (DDVP) should not be sprayed on carpets.

SPRAY DILUTION CHART

Gallons of Spray Mixture Desired	Fluid Ounces† of this product to Use	
	0.25% Spray	0.50% Spray
Water-base spray		
1	1½	2½
3	4	8
5	6½	13½
10	13½	26½
Oil-based 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

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, 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 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

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 at 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.

Fleas and 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 waterbase sprays of this product in conduits, motor housings, junction and switch boxes or other electrical equipment because of possible shock hazard. If there is need to treat such areas use only oil-base sprays. 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. 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.

PESTS OUT-OF-DOORS

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 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 this product at the rate of 2½ 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 infestation of building 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 1000 sq. ft. to thoroughly and uniformly wet the band area.

Pests of Lawn and other Ornamental and Recreational 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 mowed prior to treatment.

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 day intervals, if needed. **NOTE:** Do not use on azaleas, camelias, poinsettias, rose bushes, or variegated ivy because of possible injury to these plants.

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.

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Pest	Dosage this product per 100 sq. ft.	Remarks
Ants Armyworms Chiggers Chinch bugs Clover mite Crickets Cutworms Earwigs Fleas Grasshoppers Sod Webworms Ticks	1 1/2 fl oz	Spray when pests first appear, retreat when needed. For best results, delay watering or mowing the treated areas for 12 to 24 hours after treatment.
Turfgrass (Hyperodes) 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 including (European chaler, southern masked chaler and Japanese Beetle larvae	3 to 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 for 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 to 6 fl oz	Spray early in the season when adults first appear. Retreat 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 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 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 populations in disease free areas, apply this product 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 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.

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.

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 this product to control imported fire ants in soil attached to roots of these plants by completely submerging the ball of soil in a tank containing this product 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 this product (8 oz per 100 gallons 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 this product as a dilute solution at the rate of 1 fl oz (30cc) per 2 gallons of water. Generly 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.

Pest Controlled	Miles	Amount of this product in Water to Use		
		3 gallons	10 gallons	100 gallons
Aphids Thrips Lacewing larvae Fall webworm Grasshoppers	Mites Thrips Spittlebugs Whiteflies Yellownecked caterpillar	0.5 fl oz	1.8 fl oz	1 pint
Cutworms Leafhoppers Mealybugs	Mimosa webworm Redhumped caterpillar Thrips (exposed)	1.0 fl oz	3.2 fl oz	1 quart
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 quarts
Peach tree borer		5.0 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 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.

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 this product 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 tanks, catch basins. Consult the following table for dosage and application details.

DOSAGE for MOSQUITOES in WASTE WATER

Area to be Treated	Dosage of This Product	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 product into the inflowing water or apply to the water surface as a coarse, low pressure spray. Treat stagnant waters by diluting this product with sufficient water or oil to obtain uniform distribution.
Cesspools Sewer Tanks	2 fl oz per 100 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 this product with 3 gallons of water to make 0.25% chlorpyrifos spray and apply 1/2 pint of the mixture per catch basin as a 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 this product Will Treat
	This Product (fluid ounces)	Chlorpyrifos (pounds)	
Larval Control None to medium vegetative cover	0.8 to 1.6	0.0125 to 0.025	180 to 80
	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
	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.

STORAGE: Store in original containers with cap tightly closed, in a cool dry place inaccessible to children and pets and away from sparks, open flame, or other sources of heat or ignition. **DISPOSAL:** Do not reuse empty container. Wrap container and dispose in trash.

