

OCT - 1 1990

Ms. Molly Klettke
The Chas. H. Lilly Company
7737 NE. Killingsworth
Portland, OR 97218

Dear Ms. Klettke:

Subject: Revised Labeling
Lilly/Miller Chlorban Insect Spray
EPA Registration No. 802-530
Your Application Dated November 22, 1989

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) or 4(a) when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. Add a footnote to the statement of ingredients "Contains xylene."
 - b. In the section "Nuisance Pests Around Homes and Buildings - Outdoors" in the first paragraph, delete the word "Cockroaches."
3. Submit five (5) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your

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CONCURRENCES

SYMBOL							
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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 (H7505C)

Enclosure

LILLY/MILLER CHLORBAN INSECT SPRAY

Controls ants, fleas, chinch bugs, European Crane Fly larvae in lawns
Prevents root maggot damage
Controls nuisance pests indoors or out
Dormant spray treatment for fruit trees

ACTIVE INGREDIENT:

Chlorpyrifos (O,O-diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate) 6.79%
INERT INGREDIENTS 93.21%

Contains xylene
DURSBAN is the Reg TM of The Dow Chemical Co.

Keep out of reach of children
WARNING

See side panel for additional Precautionary Statements

NET CONTENTS ONE QUART

CHLORBAN INSECT SPRAY controls many insects on lawns and ornamentals plants. It can be used as a soil or exterior foundation spray to help prevent infestation of buildings by numerous pests and as a localized treatment to control nuisance pests indoors or out. CHLORBAN INSECT SPRAY controls root maggots in listed direct seeded vegetable crops. It can also be applied to fruit and nut trees as a dormant spray to control overwintering insects.

DIRECTIONS FOR USE

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

ESTABLISHED LAWNS AND TURF (Including Dichondra) - To control Ants (including foraging fire ants), Armyworms, Billbugs**, Centipedes, Chiggers, Chinch Bugs, Crickets, Cutworms, Earwigs, European Crane Fly Larvae (Leather Jackets)*, Flea Beetles*, Fleas, Gnats, Grasshoppers, Greenbugs, June Beetles, Leafhoppers, Lucerne Moth, Millepedes, Mites (Clover, Formula Grass, Winter Grain), Mosquitoes, Sod Webworms (lawn moth larvae), Sowbugs, Spittlebugs, Springtails, Ticks and Vegetable Weevils*. Note: Mosquitoes coming to rest on treated areas will be killed for varying periods of time.

Dilute CHLORBAN INSECT SPRAY with water as directed in the charts below. Apply as a coarse droplet spray using a low pressure tank sprayer or a hose-end sprayer such as the Lilly/Miller Big 15***. Be sure lawn is moist at time of treatment. Make a complete and uniform application over infested areas. Spray when pests first appear and re-treat when needed.

ACCEPTED
with COMMENTS
in EPA Letter Dated

OCT - 1 1990

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 802-530

Use this amount Add water to To spray this
CHLORBAN INSECT SPRAY make (gals) area of lawn (sq. ft.)

3 1/2 teaspoons	3	100
*6 tablespoons	15	500
12 tablespoons	30	1000
18 tablespocns	45	1500

***To Control European Crane Fly Larvae (Leather Jackets), Flea beetle and Vegetable weevil:**

9 tablespoons(4 1/2 fl oz)	15	500
18 tablespoons(9 fl oz)	30	1000
27 tablespoons(13 1/2 fl oz)	45	1500

****To Control Bill bugs:**

3/4 - 1 1/2 cups (6-12 fl oz)	15	500
1 1/2 - 3 cups (12-24 fl oz)	30	1000
2 1/4 - 4 1/2 cups (18-36 fl oz)	45	1500

*****How to apply with Lilly/Miller Big 15 hose-end sprayer: 1. Add 6 Tablespoons DURSBAN INSECT SPRAY to jar. 2. Fill jar with water to 15 gal. level. 3. Spray 500 sq. ft. area.**

ORNAMENTAL PLANTS

Flowers, shrubs, vines, shade and flowering trees and evergreens. Apply with a suitable tank or hose-end sprayer, such as the Lilly/Miller Six Shooter. Spray to evenly and uniformly cover infested plants. Avoid spraying to the point of excessive run-off. Spray when pests first appear and repeat at 7 to 10 day intervals. Do not apply or allow spray to contact Azaleas, Camellias, Poinsettias, Roses or Variegated Ivy because of possible injury to these plants.

Use 4 teaspoons per gallon water to control Adelgids, Ants (including foraging fire ants), Aphids, Armyworms (Fall, Yellowstriped), Bagworms, Boxelder Bugs, Cankerworms, Catalpa Sphinx, Chiggers, Citrus Mealybug, Cockroaches, Elm Spanworms, Fall Webworms, Grasshoppers, Green Fruitworms, Hornworms, Jackpine Budworms, Juniper Webworm, Katydid, Lace Bugs, Leafhoppers, Leafrollers, Maple Leafcutters, Mites, Oleander Caterpillars, Orange Tortrix, Periodical Cicada, Plant Bugs, Poplar Tentmaker, Psyllids, Puss Caterpillars, Rose Chafer, Sawflies (exposed), Sowbugs, Spittlebugs, Spring Elm Caterpillars, Springtails, Spruce Budworms, Tent Caterpillars, Thornbugs, Walnut Caterpillars, Western Spruce Budworms, Whiteflies, Yellownecked Caterpillars. For bagworms, treat when insects are in the crawler stage. For effective control of leafrollers spray should be applied before leaves are tightly rolled.

To control maple leafcutter on maple trees apply spray to larvae as cases are being formed. Do not treat sugar maple trees intended for maple syrup production. For spider mite control when large numbers of eggs are present, apply a second spray 5 to 7 days later.

Use 8 teaspoons per gallon water to control Armyworms (Beet), Beetles, Cutworms, Leafhoppers, Mahogany Webworms, Mealybugs, Mimosa Webworms, Moths, Oakworms, Redhumped Caterpillars, Thrips (exposed), Weevils. To reduce twig and branch feeding by bark beetles apply in spring or early summer. To kill migrating and invading gypsy moth larvae treat trunks and foliage. Late afternoon application will provide best control of blackvine weevils. For cottonwood leaf beetles apply when insects are first observed.

Use 5 tablespoons per gallon water to control Borers (except Peachtree and Cottonwood), Leafminers, Needleminers, Scale Crawlers. For borers apply as a coarse, low pressure spray to trunks and lower limbs when adults begin to emerge. Consult your State Extension Service for timing of sprays in your area.

Use 1 cup per gallon water to control Peachtree and Cottonwood Borers. Thoroughly wet trunks and all bark areas from ground level to lower limbs before larvae enter trees. Consult your State Extension Service for timing of sprays in your area.

NUISANCE PESTS AROUND HOMES AND BUILDINGS - INDOOR SPOT TREATMENT ONLY
To control Ants, Brown Dog Ticks, Carpet Beetles, Clover Mites, Cockroaches (including strains resistant to certain other insecticides), Crickets, Firebrats, Silverfish, and Spiders.

Apply as coarse spray or with a paintbrush to localized areas where pests are normally found or have been seen such as in dark corners of rooms and closets, cracks and crevices in walls, along and behind baseboards, beneath and behind sinks, cabinets, stoves, refrigerators and other appliances, around plumbing, fixtures and drains. Use 1 cup per gallon water.

For Ants, apply directly to trails and around doors and windows where these pests may enter. To control Brown Dog Ticks, spray pet beds and resting areas, nearby cracks and crevices, along and behind baseboards, window and door frames and other localized areas where these pests may be present. Old bedding should be discarded and replaced with clean, fresh bedding after treatment. **DO NOT TREAT PETS WITH THIS PRODUCT.** To control Carpet Beetles, spray along baseboards and edges of carpeting, under rugs and furniture, in closets and on shelving, and wherever these pests have been seen. Maximum control of Cockroaches may take 4 or 5 days.

Note: Do not apply this product around or on electrical equipment because of possible shock hazard. Remove pets and children from treatment area during application and do not allow them to return until sprays have dried. Apply only enough spray to thoroughly cover treated surfaces. Do not overapply to the point of runoff, do not apply as a

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space spray, and do not allow the spray to contact food or food preparation surfaces. Dishes and other food utensils should be washed with soap and water if they are contacted by spray during application.

NUISANCE PESTS AROUND HOMES AND BUILDINGS - OUTDOORS

To control Ants, Bees, Boxelder Bugs, Carpenter Ants, Chiggers, Clover Mites, ~~Cock roaches~~, Crickets, Earwigs, Fleas, Flies, Hornets, Millipedes, Mosquitoes, Scorpions, Silverfish, Sowbugs (Pillbugs), Spiders, Ticks, Wasps, and Yellowjackets. Make a residual spray or apply by paintbrush to outside surfaces of buildings including porches, screens, window frames, eaves, patios, garages, or other areas where pests congregate using 1 cup per gallon water.

To help prevent infestation of buildings by the listed insects treat a band of soil 6 to 10 feet around and adjacent to the exterior wall. Also treat the exterior building foundation to a height of 2 to 3 feet, especially where pests are active and may find entrance. Apply as a coarse spray at the rate of 3 1/2 teaspoons per 3 gallons water to cover 100 sq. ft. area using a low pressure tank sprayer or hose-end sprayer (such as the Lilly/Miller Big 15). SEE USE PRECAUTIONS. For Scorpions, treat or remove debris such as lumber, firewood, and other materials which serve as shelter for these insects.

To control Cockroaches, Fleas, Spiders, Ticks and other listed nuisance pests in garbage areas, on walkways, on brush, and in recreational or waste areas. Spray to thoroughly cover 1000 sq. ft. of low underbrush, grassy areas, weeds, ground surface and debris using 7 teaspoons in 2-5 gallons water.

To control Imported Fire Ants. In a sprinkling can, mix 3 1/2 tablespoons with one gallon water. Gently and thoroughly wet mound and surrounding area to a diameter of 4 feet. Pressurized sprays may disturb the ants and cause migration. Use one gallon solution per mound. Treat new mounds as they appear. For best results, apply in cool weather, or in early morning or late evening.

FOR ROOT MAGGOT CONTROL IN DIRECT SEEDED VEGETABLES

Apply only at seeding. Do not make more than one application per planting.

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage: Use 2 to 4 tablespoons in a gallon of water and apply with sprinkling can in a band 2 to 4 inches wide over 100 linear feet of row after planting seed.

Radishes: Use 3 1/2 teaspoons in a gallon of water and apply as a soil drench in the seed furrow, with the seed, to 100 linear feet of row.

Rutabagas, Turnips: Use 2 to 4 tablespoons in a gallon of water and apply in a band 2 to 4 inches wide over 100 linear feet of row after

planting seed. For rutabagas, it would be realistic to expect partial protection because of their extended growing season.

DORMANT OR DELAYED-DORMANT FRUIT TREE SPRAY

	Rosy Apple Aphid	San Jose Cutworm Scale	Peach Twig Borer	Mealy Plum Aphid
Apple	X	X		
Pear		X	X	
Plum		X	X	X
Prune		X	X	X
Almond		X	X	
Peach		X	X	
Nectarine		X	X	

Apply as a dormant spray, just before flower and leaf buds open. Or, apply as a delayed dormant spray, when bud scales are open, and leaves and petals are beginning to show.

Use 4-8 teaspoons of CHLORBAN INSECT SPRAY plus 8-16 teaspoons of Lilly/Miller Superior Type Spray Oil per gallon of water. To make greater spray volume, use 3/4 to 1 1/4 pint CHLORBAN INSECT SPRAY plus 1 1/4 to 2 1/2 pint Lilly/Miller Superior Spray Oil per 15 gallons of water.

Use higher rate when severe infestations are expected. Apply with Lilly/Miller Big 15 hose-end sprayer or tank sprayer. Make only one application per season.

STORAGE AND DISPOSAL

Store this product in its original container and keep in a locked storage area out of reach of children and domestic animals. Do not reuse container. Rinse thoroughly before discarding. Securely wrap original container in several layers of newspaper and discard in trash.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Harmful if swallowed. May be absorbed through skin. May be injurious to eyes and skin. Do not take internally. Avoid breathing spray mist or vapors. Wash thoroughly after handling or after contact with skin. Do not smoke while using. Keep pets and children off treated areas until spray has dried. Handle concentrate in a ventilated area. Do not spray vegetable gardens or other plants used for food purposes, except as specifically directed.

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Do not induce vomiting. Call a physician immediately. This product contains a petroleum based solvent which may present an aspiration hazard. If On Skin: Remove contaminated clothing and wash skin with soap and water. If In Eyes: Flush with plenty of water. Call a physician immediately. Note To Physician: Chlorpyrifos is a

cholinesterase inhibitor. Atropine by injection is antidotal. 2-PAM may also be given in conjunction with stropine, but should never be used alone.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds and other wildlife. Do not apply directly to water or wetlands. Do not contaminate water when disposing of equipment washwaters. 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 OR CHEMICAL HAZARD

Do not use, pour, spill or store near heat or open flame.

NOTICE: Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risks of use and/or handling of this material when such use and/or handling is contrary to label instructions.

THE CHAS. H. LILLY CO.
PORTLAND, OREGON 97218
EPA Reg. No. 802-530
EPA Est. 802-OR-1

