

Specimen Label

Professional Turf Insecticide

To Be Applied Only by or Under the Direct Supervision of Commercial Applicators Responsible for Insect Control Programs. ~~Sale to or Use by Persons Owning or Occupying a Dwelling is Strictly Prohibited.~~

Active Ingredient(s):

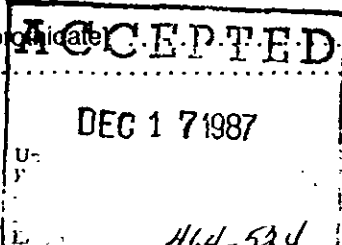
Chlorpyrifos [O,O-diethyl O-(3,5,6-trichloro-2-pyridyl) phosphoroglycidate] 44.4%

Inert Ingredients 55.6%

Contains 4 pounds of chlorpyrifos per gallon.

E.P.A. Registration No. 464-524

E.P.A. Est. 464-MI-1



KEEP OUT OF REACH OF CHILDREN

WARNING

AVISO:

PRECAUCION AL USUARIO:

Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

MAY BE FATAL IF SWALLOWED • EXCESSIVE ABSORPTION THROUGH SKIN MAY BE FATAL • CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY • CAUSES SKIN IRRITATION

Do Not Get In Eyes, On Skin Or Clothing • Wear Eye Protection • Avoid Breathing Vapors And Spray Mist • Handle Concentrate In A Ventilated Area • ~~Wear Protective Clothing And Chemically Resistant Gloves When Handling~~ • Wash Thoroughly With Soap And Water After Handling And Before Eating Or Smoking • Remove Contaminated Clothing And Wash Before Reuse • Keep Away From Food, Feedstuffs And Water Supplies

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Call a physician or Poison Control Center immediately. Do not induce vomiting. Contains an aromatic petroleum solvent. Do not give anything by mouth to an unconscious person. **If On Skin:** Immediately wash with plenty of soap and water. Get medical attention. **If In Eyes:** Flush with plenty of water for 15 minutes. Get medical attention. **If Inhaled:** Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention immediately.

NOTE TO PHYSICIAN: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-

PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote 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 pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water by cleaning of equipment or disposal of waste. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

NOTICE

Read and understand the entire label before using. Use only according to label directions.

Before buying or using this product, read "WARRANTY LIMITATIONS AND DISCLAIMER" elsewhere on this label. If terms are not acceptable, return unopened package 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 WARRANTY LIMITATIONS AND DISCLAIMER.

IN CASE OF AN EMERGENCY

endangering life or property involving this product, call collect 517-636-4400

AGRICULTURAL CHEMICAL

Do Not Ship or Store with Food, Feeds, Drugs, or Clothing

Professional Turf

When handling concentrate wear protective clothing such as long-sleeved shirt, long-legged pants, hat, rubber gloves and footwear resister. Aromatic solvents, i.e. Neoprene or Nitrile Butadiene Rubber.



OCT 21 1987

2/8

DIRECTIONS FOR USE

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

Do not formulate this product in end-use products.

GENERAL INFORMATION

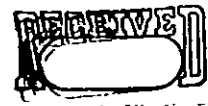
Professional Turf Insecticide is an emulsifiable concentrate designed for use as a spray to control various pests injurious to trees, turf and ornamental plants. The pests controlled are listed in the accompanying tables. Professional Turf Insecticide is compatible with insecticides, miticides, and fungicides commonly recommended except for alkaline materials such as Bordeaux mixture and lime. A small amount of spray mixture should be prepared to check for compatibility before a large volume of spray is mixed.

Attention: Do not allow adults, children or pets on treated areas until spray has dried. Keep out of fishpools and other bodies of water. Do not treat vegetable gardens. Do not allow livestock to graze in treated areas. Do not feed treated grass cuttings (hay) or seed screenings to livestock nor use hay for livestock bedding. Do not use in poultry houses.

Turf and Other Outdoor Uses

Use Professional Turf Insecticide to control the pests listed in the following table by application at the recommended dosages. Dilute Professional Turf Insecticide in water 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. Spray when pests first appear; retreat when needed

, but not more than once per every 7 days.



OCT 21 1987

Pest†	Amount of PTI per		Specific Directions
	1000 sq. ft.	Acre	
Ants (including foraging fire ants) Armyworm (Such as: Beet, Fall, Yellowstriped) Centipedes Chiggers(1) Chinch bugs Clover mites Crickets Cutworms Earwigs Fiery skipper Fire ants (mounds)(2) Fleas Grasshoppers Greenbugs June beetles Leafhoppers Lucerne moth Millipedes Mites (Such as: Clover, Eumites, grass, Winter grain) Mosquitoes(3) Sod webworm(4) (lawn moths) Sowbugs Springtails Ticks(1)	3-4 fl. oz.	1 qt.	1. Use Professional Turf Insecticide for area control of 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 a possible public health problem. Do not allow public use of treated areas during application or until spray has dried. Apply Professional Turf Insecticide in water at the rate of 1 2 pint per acre (equivalent to 1 2 fl. oz. per 2,700 sq. ft.) using a hydraulic sprayer, mist applicator, knapsack sprayer, or other suitable hand- or power-operated 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. For individual fire ant mounds, apply Professional Turf Insecticide as a drench, diluted at the rate of 1 fl. oz. (30 ml) per 4 gallons of water. Gently sprinkle a total of 1 gallon of the diluted emulsion over the surface of each mound using a gentle spray (such as a sprinkler can). Thoroughly wet mound and surrounding areas 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.

Insecticide

Bentley sprinkle 1 to 2 gallons of the

Thoroughly drench mound and surrounding areas to 2 foot diameter.

Pillbugs

†Numbers in parentheses refer to Specific Directions.

Pest:	Amount of PTI per		Specific Directions
	1000 sq. ft.	Acre	
			<p>3. Mosquitoes coming to rest on areas treated for control of turf pests will be killed for varying periods of time after treatment, depending on exposure of treated areas to weathering conditions.</p> <p>4. For sod webworms delay watering or mowing the treated area for 12 to 24 hours after treatment.</p>
European crane fly	1 fl. oz.	1 1/2 qt.	
Turfgrass weevil (<i>Hyperodes</i>)(1)	1 1/2 fl. oz.	2 qt.	1. Spray suspected problem areas in mid-April and again in mid-May or as recommended by your Local Agricultural Extension Service specialist.
White grubs (Such as: Black turfgrass ateniens, European chafer, Southern masked chafer, and Japanese beetle larvae)(1)	1 1/2 to 3 fl. oz.	2 qt. to 1 gal.	1. 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. Immediately after spraying, irrigate the treated area with 1/2 to 1 inch of water to wash the insecticide into the underlying soil.
Bluegrass billbugs(1)	3/4 to 3 fl. oz.	1 qt. to 1 gal.	1. For bluegrass billbugs spray early in the season when adults first appear. Retreat as needed.

†Numbers in parentheses refer to Specific Directions.

Pest Control on Outside Surfaces and Around Buildings

Apply Professional Turf Insecticide by application as a residual spray to outside surfaces of buildings including porches, window frames, eaves, patios, garages, refuse dumps and other areas where pests congregate or have been seen. Repeat treatment as needed to maintain effectiveness.

, but not more often than once per every 7 days.

RECEIVED

OCT 21 1987

Pest:	Amount of PTI per in Water to Make:			Specific Directions
	1 gallon	10 gallons	50 gallons	
Ants				<p>1. To help prevent infestation of buildings 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 4 fluid ounces of Professional Turf Insecticide per 50 gallons of water and apply as a coarse spray at the rate of about 10 gallons spray mixture per 1,000 sq. ft. to thoroughly and uniformly wet the band area.</p> <p>2. For scorpions treat remove accumulations of lumber, firewood, and other materials which serve as insect harborage sites.</p> <p>↑</p> <p>Make a through perimeter treatment around the structure using directions in (1) above.</p>
Bees				
Carpenter ants				
Clover mites				
Cockroaches	1/2 to 1/3 fl. oz.	3/4 fl. oz.	4 fl. oz.	
Crickets				
Earwigs				
Fleas				
Flies				
Hornets				
Millipedes				
Mosquitoes				
Scorpions(2)				
Silverfish				
Sowbugs				
Spiders				
Ticks				
Wasps				
Yellowjackets				
Boxelder Bugs				
Elm Leaf Beetles (Adults)				
Springtails				

†Numbers in parentheses refer to Specific Directions.

4/8

Ornamentals (Outdoor)

Use Professional Turf Insecticide to treat flowers, shrubs, evergreens, vines, shade and flowering trees found to be infested with pests listed in the following table. Dilute Professional Turf Insecticide with water according to directions given in the table and apply using suitable hand- or power-operated spray equipment in a manner to provide complete and uniform coverage. For best results apply a coarse spray to thoroughly wet 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. Do not use on fruit and nut trees that will bear fruit within 1 year of application.

Consult your State Agricultural Experiment Station or Extension Service specialist for application timing and other specific use information.

Note: Ornamentals: Professional Turf Insecticide has been tested on numerous ornamental plants without causing serious phytotoxicity. However, do not use on azaleas, camellias, poinsettias, rose bushes, or variegated ivy because of possible injury to these plants.

Pest:	Amount of PTI per in Water to Make:			Specific Directions
	1 gallon fl. oz.	3 gallons fl. oz.	100 gallons fl. oz.	
Adelgids (Such as: Cooley and Eastern spruce galls, Pine bark) Ants (including foraging fire ants) Aphids (Such as: Apple, Chrysanthemum, Cottonwood, Elm leaf, Peach, Rose, Spirea, Woolly) Armyworms (Such as: Fall, Yellowstriped) Bagworms (1) Boxelder bugs Cankerworms Carpenter ants (5) Catalpa sphinx Chiggers Clover mite → Citrus mealybugs Elm spanworm Fall webworm ← (6) Grasshoppers Green fruitworm Hornworms Jackpine budworm Juniper webworm Katydid Lace bugs Leafhoppers Leafrollers (2) Maple leafcutter (3) Mites (Such as: Clover, Red spider, Southern red) (4) Oleander caterpillar Orange tortrix Periodical cicada Plant bugs Poplar tentmaker Psyllids Puss caterpillar Rose chafer Sawflies, exposed (Such as: Pine, Pin oak, Redheaded) Sowbugs Spittlebugs Spring elm caterpillar Springtails Spruce budworm Tent caterpillars (Such as: Eastern, Forest, Western) Thornbug Walnut caterpillar Western spruce budworm Whiteflies Yellownecked caterpillar	1.12 fl. oz.	1.4 fl. oz.	8 fl. oz.	<ol style="list-style-type: none"> For bagworms treat when insects are in the crawler stage. For effective control of leafrollers spray should be applied before leaves are tightly rolled. For effective control of 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 effective control of spider mites when large numbers of eggs are present, apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly-hatched nymphs. Locate carpenter ant nest, if possible, and drench thoroughly. For control of Fall Webworm direct spray into web and immediately adjacent foliage.
Armyworms (Beet) Beetles (EMERALDINE, Native elm bark) (1) Cutworms Leafhoppers Mahogany webworm Mealybugs Mimosa webworm	1.5 fl. oz.	1.2 fl. oz.	1 pt.	<ol style="list-style-type: none"> To reduce twig and branch feeding by bark beetles applications should be made in the spring or early summer.



GGT 2 1 1987

†Numbers in parentheses refer to Specific Directions.

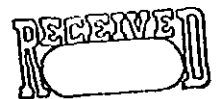
5/8

Foliar feeding beetles (Such as: Blister, leaf (1), Elm leaf, Flea, Fuller rose, Japanese, June, Willow leaf)

Pest:	Amount of PTI per in Water to Make:			Specific Directions
	1 gallon	3 gallons	100 gallons	
Moths (Such as: Browntail, Cypress tip, Douglas fir tussock, European pine shoot, Gypsy(2), Holly bud, Nantucket pine tip, Pandora, Pitch pine tip, Subtropical pine tip, Tussock) Sawworms (Such as: California, Orangestriped, Redhumped) Redhumped caterpillar Thrips (exposed) Weevils (Such as: Blackvine(3), Yellow Poplar, Pine reproduction)	1 6 fl. oz.	1.2 fl. oz.	1 pt.	2. To kill migrating and invading gypsy moth larvae treat trunks and foliage 3. Blackvine weevils are night feeders. Late afternoon spraying will give control in some areas
Beetles (Such as: Cottonwood leaf(1), Elm leaf, Flea, Willow leaf)	1 6 to 1 3 fl. oz.	1 2 to 1 fl. oz.	1 pt to 1 qt.	1. For cottonwood leaf beetles use Professional Turf Insecticide in water to control larvae and adults infesting cottonwoods. Make the treatment when field counts indicate damaging beetle populations are developing or present
Borers(1): Clearwing moths (Such as: Ash, Dogwood, Lesser peachtree, Lilac, Oak, Rhododendron), Metallic wood (Such as: Bronze birch, Flatheaded appletree, Twotined chestnut), Longhorned beetles (Such as: Locust, Red oak) Cranberry girdler larvae(2) Leafminers Needleminers (Such as: Jeffrey pine, Lodgepole pine, Spruce) Scale crawlers (Such as: Cottonycushion, Cottonymaple, Euonymus, Fletcher, Florida wax, Golden oak, Hemispherical, Lecanium, Magnolia, Oak kermes, Oystershell, Pine needle, San Jose, Tea, White birch)	1 3 fl. oz.	1 fl. oz.	1 qt	1. For borers, apply Professional Turf Insecticide 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. Apply uniformly as a coarse low-pressure spray. 2. For cranberry girdler larvae apply 1 quart of Professional Turf Insecticide per acre. Direct spray at the base of tree using 50 gallons of water per acre. Irrigate immediately after application for soil penetration of 1-2 inches. Treat after egg laying during the summer.
Borers (Such as: Cottonwood, Peachtree)(1)	1 fl. oz.	3 fl. oz.	3 qt	1. For peachtree borers apply Professional Turf Insecticide in water to flowering trees and shrubs of the genus <i>Prunus</i> 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.
Beetles(1) (Such as: Cottonwood leaf, Elm leaf, Flea, Fuller rose, Native elm bark(2), Willow leaf)	1 1 3 fl. oz.	4 fl. oz.	1 gal.	1. For preventive treatment apply the spray to the main trunk of trees in the early spring or when threat of attack exists from nearby infested trees. For remedial treatment apply the spray to the main trunk of infested trees or logs when damage occurs but before adult beetles begin to emerge. 2. To prevent native elm bark beetles from overwintering in uninfested trees, apply Professional Turf Insecticide 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. Application can be made with either a backpack mistblower or a hydraulic pressure sprayer from spring through to early fall.

†Numbers in parentheses refer to Specific Directions.

OCT 2 1 1987



15/8

Pest:	Amount of PTI per in Water to Make:			Specific Directions
	1 gallon	3 gallons	100 gallons	
Wood infesting Beetles (Such as: Ambrosia, Anobidae, Black turpentine, European elm bark, Japanese, June, Southern pine, Spruce)(1) Carpenter ants	2 2 3 fl oz.	8 fl oz	2 gal.	1 For preventive treatment apply the spray to the main trunk of trees in the early spring or when threat of attack exists from nearby infested trees. For remedial treatment apply the spray to the main trunk of infested trees when damage occurs but before adult beetles begin to emerge

*Numbers in parentheses refer to Specific Directions.

Dormant Spray (Tree Pests)

Use Professional Turf Insecticide as a dormant or delayed dormant spray at the rates indicated to control the listed insects. Spray the entire tree ~~to runoff~~ using suitable ground spray equipment ~~to dampen~~ Use the higher dosage of Professional Turf Insecticide for severe infestations. Use oil as recommended by your State Agricultural Experiment Station or Extension Service specialist.

Restrictions: Make only one application during the dormant season. Do not allow meat or dairy animals to graze in treated areas.

Pest	Amount of PTI per in Water to Make:			Specific Directions
	1 gallon	3 gallons	100 gallons	
Aphids (Such as: Mealy plum, Rosy apple, Woolly apple) Borer (Such as: Peach twig) Cutworms (Such as: Climbing) Leafrollers (Such as: Pandemis) Pear psylla adults Plant bugs Scale (Such as: San Jose)	1 12 to 1 6 fl oz.	1 4 to 1 2 fl. oz	1 2 to 1 pt	Tank mix with 1 to 2 gallons of petroleum spray oil recommended for dormant use in 100 gallons of water.

RECEIVED

OCT 21 1987

7/8

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Storage: Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F for extended periods of time. Storage below 20 F may result in formation of crystals. If product crystallizes, store at 50 to 70 F and agitate to redissolve crystals. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

WARRANTY LIMITATIONS AND DISCLAIMER

The Dow Chemical Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions therein under normal conditions of use. THIS IS THE ONLY WARRANTY MADE ON THIS PRODUCT. NO OTHER EXPRESS AND NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OUTSIDE OF THIS LABEL. Therefore, 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 (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), under abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes, etc.) or under conditions not reasonably foreseeable to or beyond the control of seller.

When buyer or user suffers losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability, or other legal theories), buyer or user must promptly notify in writing The Dow Chemical Company of any claims to be eligible to receive either remedy given below. The EXCLUSIVE REMEDY OF THE BUYER OR USER and the LIMIT OF LIABILITY of The Dow Chemical Company or any other seller will be one of the following, at the election of The Dow Chemical Company:

(1) Refund of purchase price paid by buyer or user for product bought, or

(2) Replacement of amount of product used.

The seller will not be liable for consequential or incidental damages or losses

The terms of this Warranty Limitations And Disclaimer cannot be varied by any written or verbal statements or agreements. Any employee or sales agent of the seller is not authorized to vary or exceed the terms of this Warranty Limitations And Disclaimer in any manner.

70293-L2

B1285

RQ/INSECTICIDE LIQUID N.O.S.
(Chlorpyrifos)
NA1993



THE DOW CHEMICAL COMPANY
Midland, Michigan 48674 U.S.A.

*Trademark of THE DOW CHEMICAL COMPANY

RECEIVED

OCT 21 1987

8/8



OCT 21 1987

SPECIMEN LABEL 86-1376 DATE CODE
B1285
REPLACES 86-1376 DATE CODE A385
DISCARD PREVIOUS SPECIMEN LABELS

- REVISIONS INCLUDE:
- 1) PRECAUTIONARY STATEMENTS
 - 2) STATEMENT OF PRACTICAL TREATMENT
 - 3) ENVIRONMENTAL HAZARD STATEMENT
 - 4) STORAGE STATEMENT
 - 5) INGREDIENTS STATEMENT