

Reg # 62719-68

PM-19

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division

Robert F. Bischoff  
DOWELANCO  
QUAD IV 9002 PURDUE RD  
INDIANAPOLIS IN 46268

06/23/93

Subject: Label Amendment Submission of 06/23/93  
to Comply with WPS Labeling Requirements  
EPA Reg Nr. 62719-68  
DURSBAN 50W INSECTICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped, "Accepted with comments", is attached. Make any required changes described below and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (H-7504C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, DC 20460-0001

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DOWELANCO  
EPA Reg. Number: 62719-68  
DURSBAN 50W INSECTICIDE  
Application date: 06/23/93  
Original Submission

Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

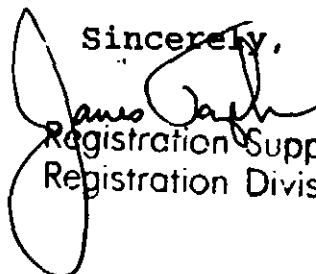
You omitted the Personal Protective Equipment heading.

The Agricultural Use Requirements referral statement in your proposed label does not reflect the language prescribed on page 43 of the Main Labeling Guidance.

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling, the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,



Registration Support Branch  
Registration Division

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(Editor's note: Deleted text indicated by strike-through and added text underlined. EPA copy dated 04/28/89 and Worker protection standard.)

(Container Label)  
(logo) DowElanco

Dursban® 50W  
Insecticide

To be applied only by commercial applicators responsible for insect control programs, or persons under their direct supervision

Active ingredient:

chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl)phosphorothioate.....	50%
Inert ingredients.....	50%

**Precautionary Statements**

**Hazards to Humans and Domestic Animals**

**WARNING**

**AVISO:**

~~Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.~~

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

**May Be Fatal If Swallowed • Harmful If Inhaled Or Absorbed Through Skin • Causes Eye Irritation**

~~Do not get in eyes, on skin or clothing. Avoid breathing dust and spray mist. 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.~~

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear
- Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**User Safety Recommendations**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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ACCEPTED  
with COMMENTS  
by EPA Letter Dated  
**OCT 18 1993**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
62719-68

**First Aid****An organophosphate insecticide/miticide.**

**If swallowed:** Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention.

**If in eyes:** Flush with plenty of water for 5 minutes. Get medical attention if irritation persists.

**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.

**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 when disposing of equipment washwaters. 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.

**Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), and Directions for Use including Agricultural Use Requirements and Storage and Disposal.**

**Notice:** Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet. In case of emergency endangering health or the environment involving this product, call collect 517-636-4400.

**Agricultural Chemical:** Do not ship or store with food, feeds, drugs or clothing.

EPA Registration No. 62719-68

EPA Est. 477-TX-1

\*Trademark of DowElanco

DowElanco • Indianapolis, IN 46268, U.S.A.

**Specialty Insecticide**

**Net Weight \_\_\_ lb**

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(datapack, Cover, Dursban 50W):

(logo) DowElanco

Dursban® 50W  
Insecticide

To be applied only by commercial applicators responsible for insect control programs,  
or persons under their direct supervision

Active Ingredient:

chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl)phosphorothioate..... 50%

Inert Ingredients..... 50%

Keep Out of Reach of Children

WARNING

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Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
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4400.

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

EPA Registration No. 62719-68  
level 70

EPA Est. 477-TX-1

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DowElanco • Indianapolis, IN 46268, U.S.A.

Specialty Insecticide

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(datapack, page 1):

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## Precautionary Statements

### Hazards to Humans and Domestic Animals

#### WARNING

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#### Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear
- Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

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### User Safety Recommendations

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### First Aid.

#### An organophosphate insecticide/miticide.

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**Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.  
Do not apply this product through any type of irrigation system.  
Do not formulate this product into other end-use products.  
Do not apply this product in a way that will contact workers or other persons, either directly or through drift.  
Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exemptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

**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 122°F. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Pesticide Disposal:** Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Completely empty fiber can by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of containers in a sanitary landfill or by incineration if allowed by State and Local Authorities.

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General Information

Dursban 50W insecticide is a wettable powder formulation 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. Dursban 50W 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.

**Chemigation:** Do not apply this product through any type of irrigation system.

~~—Applicator Safe Handling Procedures~~

~~When exposure to spray mist is likely to occur, wear protective equipment and clothing (eye protection, long-sleeved coveralls and waterproof gloves) to prevent exposure of eyes and skin. To prevent breathing of spray mist during application in confined areas, wear a respirator and cartridge(s) approved by NIOSH/MSHA for pesticides.~~

**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.

**Mixing Directions**

Dursban 50W mixes readily with water to form a suspension. Mix the required amount of Dursban 50W with a small quantity of water and add this premix while filling the spray tank. Alternatively, fill the tank with the required amount of water and then add the premix. Maintain sufficient agitation during both mixing and application to ensure uniform suspension of the Dursban 50W in the spray mixture. Dursban 50W contains a wetting agent. Do not use additional wetting agents, spreaders or stickers.

Approved Uses

**Turf and Other Outdoor Uses**

Use Dursban 50W to control pests infesting lawns, golf courses, parks, perennial turf grasses grown for seed or sod, etc., listed in the following table by application at the recommended dosages and in accordance with the directions given below. Dilute Dursban 50W 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. For best results, the lawn should be moist at time of treatment. Spray when pests first appear; retreat when needed, but not more often than once every 7 days.

Pest†	Amount of Dursban 50W per:	Specific Directions
-------	-------------------------------	---------------------

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ants (including foraging fire ants	1000 sq ft	Acre	<p>1. Use Dursban 50W 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 Dursban 50W in water at the rate of 1/2 lb/acre (equivalent to 1/2 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, ground surfaces and debris using enough spray volume to obtain thorough coverage, usually 40 to 100 gallons per acre.</p> <p>2. Mosquitoes coming to rest on areas treated for control of pests will be killed for varying periods of time after treatment, depending on exposure of treated areas to weathering conditions.</p> <p>3. For best results in controlling sod webworms, delay watering or mowing the treated area for 12 to 24 hours after treatment.</p> <p>4. For individual Fire ant mounds, apply Dursban 50W at a rate of 1.5 oz per each 2 gallons of water. Gently sprinkle 1 to 2 gallons of dilution over the surface of each mound. Avoid disturbing mounds and treat new mounds as they appear.</p>
armyworms (beet) (fall) (yellowstriped)	3/4 oz	2 b	
centipedes			
chiggers <sup>1</sup>			
chinch bugs			
clover mites			
cutworms			
crickets			
earwigs			
fiery skipper			
Fire ants (mounds) <sup>4</sup>			
fleas			
gnats			
grasshoppers			
greenbugs			
June beetles			
leathoppers			
Lucerne moths			
millipedes			
mites (clover) (Bermuda grass sturt) (winter grain)			
mosquitoes <sup>2</sup>			
pillbugs			
sod webworm <sup>3</sup> (lawn moths)			
sowbugs			
springtails			
ticks <sup>1</sup>			
European crane fly	1 oz	3 b	<p>1. Spray suspected problem areas in mid-April and again in mid-May or as recommended by your Local Agricultural Extension Service Specialist.</p>
turfgrass weevil <sup>1</sup> ( <i>Hyperodes</i> )	1 1/2 oz	4 b	

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white grubs<sup>1</sup>  
(black turfgrass ataenius)  
(European chafer)  
(scutner masked chafer)  
(Japanese beetle larvae)

1 1/2 to 3 oz

4 to 8 lb

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<sup>1</sup>

3/4 to 3 oz

2 to 8 lb

1. For bluegrass billbugs, spray early in the season when adults first appear. Retreat as needed.

chiggers<sup>1</sup>  
(turkey pens)

3 oz

8 lb

1. For control of chiggers infesting outdoor turkey pens, apply Dursban 50W as a spray to the soil using 100 to 150 gallons of water per acre.

To prevent turkeys from becoming infested with chiggers, spray the soil in pens just before turkeys are transferred to them. For turkeys already infested with chiggers, spray the soil in pens thoroughly. Allow at least three weeks for chigger lesions on the turkeys to heal before turkeys are slaughtered. For optimum results, spray a 10 to 15 ft protective area around the periphery of the treated pens.

Treatment is limited to 2 applications to the soil in turkey pens at intervals of not less than 4 weeks. Do not treat soil in turkey pens later than 7 days before turkeys are to be slaughtered. Avoid getting the spray on feed or in waterers. Open feed should be covered during spraying operations, and water troughs should be flushed out immediately after the spraying operations. Do not spray Dursban 50W directly on the turkeys.

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Imported fire ants in commercial  
sod<sup>†</sup>

6oz

16b

1. Imported fire ants: Apply Dursban 50W as a spray to the area of sod to be cut. Immediately after applying the spray soak in with at least 1/2 acre-inch of water or a sufficient volume to thoroughly soak below the cut line. Do not apply a volume or rate of water to cause runoff. Sod can be cut when vegetation has dried and when soil is moist but not wet.

**Precaution:** Personnel handling treated sod should wear elbow-length chemically resistant gloves and apron. Protective clothing and boots should be worn to prevent repeated skin exposure to treated sod.

**Certification Period:** 42 days from day of application.

<sup>†</sup>Superscripts refer to "Specific Directions".

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**Pest Control on Outside Surfaces, Around and Under Structures or in Crawl Spaces**  
Apply Dursban 50W by application as a residual spray to outside surfaces of buildings including porches, window frames, eaves, crawl space areas and surfaces, patios, garages, refuse dumps and other areas where pests congregate or have been seen.

Repeat treatment as needed to maintain effectiveness. Avoid application to surfaces where visible residues are objectionable.

Pest†	Amount of Dursban 50W In Water to Make:			Specific Directions
	1 gal	10 gal	50 gal	
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 to 16 ounces (one to four 4 oz packets) of Dursban 50W 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, remove accumulations of lumber, firewood and other materials which serve as harborage sites. Dursban 50W may be applied as a residual spray to surfaces immediately below such materials. Perimeter treatments may reduce pest immigration from surrounding areas.</p> <p>3. Under Structures or In Crawl Spaces: In treating under structures such as crawl spaces, apply spray to foundation areas, cracks and crevices, along sill line, foundation vents, door frames and other areas where pests may find entry or harborage.</p>
bees				
boxelder bugs				
carpenter ants				
clover mites	1/12 to	3/4 to	4 to	
cockroaches	1/3 oz	3 oz	16 oz	
crickets				
earwigs				
elm leaf beetles (adults)				
firebrats				
fleas				
flies				
hornets				
millipedes				
mosquitoes				
pillbugs				
scorpions <sup>2</sup>				
silverfish				
sowbugs				
spiders				
springtails				
symphylans				
ticks				
wasps	1/12 to	3/4 to	4 to	
yellowjackets	1/3 oz	3 oz	16 oz	

†Superscripts refer to "Specific Directions".

#### Ornamentals (Outdoor, Greenhouse, Shadehouse, Nurseries, etc.)

Use Dursban 50W to treat flowers, shrubs, evergreens, vines and shade and flowering trees found to be infested with pests listed in the following table. Dilute Dursban 50W 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.

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

**Note for Greenhouse Grown Ornamentals:** Environmental factors significantly affect phytotoxicity. While Dursban 50W has been tested on numerous ornamental plants without causing serious phytotoxicity, because of the numerous varieties grown, it is recommended that a small group of plants be treated at the recommended rate under the anticipated growing conditions and observed for phytotoxic symptoms. Two test sprays should be made 7 days apart and the plants observed for another 7 days after the second treatment. Significant phytotoxicity has been observed in the following species following treatment with Dursban 50W. Apply to these species at your own risk.

### Plant Species

#### Common Name

copperleaf  
zebra plant  
schefflera  
black olive  
papayas  
cissus  
croton  
ficus  
weeping fig  
Cuban laurel  
yellow hibiscus  
red/Chinese hibiscus  
impatiens  
Boston fern, fluffly ruffic fern  
petunia  
Belinda, caramia,  
lavande, Jack Frost

#### Scientific Name

*Acalyphis wilkesiana*  
*Aphelandra squarosa*  
*Brassaia actinophylla*  
*Bucida buceras*  
*Carica papaya*  
*Cissus antarctica*  
*Codiaeum variegatum*  
*Ficus nitida*  
*Ficus pumila*  
*Ficus retusa*  
*Hibiscus calycinus*  
*Hibiscus rosa-sinensis*  
*Impatiens* spp.  
*Nephrolepis exaltata*  
*Petunia* s. sp.  
  
*Rosa* s. sp.

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Pest†	Amount of Dursban 50W In Water to Make:			Specific Directions
	1 gal	3 gal	100 gal	
adelgids (cooley spruce gall) (eastern spruce gall) (pine bark)	1/12 oz	1/4 oz	1/2 lb	<p>1. For bagworms, treat when insects are in the crawler stage.</p> <p>2. For effective control of fall webworm, direct spray into web and immediately surrounding foliage.</p> <p>3. For effective control of leafrollers, spray should be applied before leaves are tightly rolled.</p> <p>4. 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.</p> <p>5. 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.</p>
ants (including foraging fire ants)				
aphids (apple) (chrysanthemum) (cottonwood) (elm leaf, (peach) (rose) (spirea)				
armyworms (fall) (yellowstriped)				
bagworms <sup>1</sup>				
boxelder bugs				
cankerworms				
catalpa sphinx				
chiggers				
citrus mealybugs				
clover mite				
cockroaches (American) (Asian wood) (smokey brown)				

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elm sparworms  
fall webworms<sup>2</sup>  
grasshoppers  
green fruitworm  
hornworms  
jackpine budworm  
juniper webworms  
katydids  
lace bugs  
leafhoppers  
leafrollers<sup>3</sup>  
maple leafcutter<sup>4</sup>  
mites<sup>5</sup>  
    (red spider)  
    (southern red)  
oleander caterpillars  
orange tortrix  
periodical cicada  
plant bugs  
poplar tentmaker  
phyllids  
puss caterpillars  
rose chafer  
sawflies, exposed  
    (pine)  
    (pin oak)  
    (redheaded)  
sowbugs  
spittlebugs  
spring elm caterpillars  
spruce budworms  
tent caterpillars  
    (eastern)  
    (forest)  
    (western)  
thornbugs  
walnut caterpillars  
western spruce budworms  
whiteflies  
yellownecked caterpillars

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armyworms	1/6 oz	1/2 oz	1 b	<p>1. To reduce twig and branch feeding by bark beetles, applications should be made in the spring or early summer.</p> <p>2. To control migrating and invading gypsy moth larvae, treat trunks and foliage.</p> <p>3. Blackvine weevils are night feeders. late afternoon spraying will give control in some areas.</p>
(beet)				
beetles				
(native elm bark) <sup>1</sup>				
cutworms				
leafhoppers				
mahogany webworms				
mealybugs				
mimosa webworms				
moths				
(browntail)				
(Cypress tip)				
(Douglas fir tussock)				
(European pine shoot)				
(gypsy) <sup>2</sup>				
(holly bug)				
(Nantucket pine tip)				
(Pandora)				
(pitch pine tip)				
(subtropical pine tip)				
(tussock)				
oakworms				
(California orangestriped)				
(redhumped)				
redhumped caterpillars				
thrips				
(exposed)				
weevils				
(blackvine) <sup>3</sup>				
(yellow poplar)				
(pine reproduction)				
foliar feeding beetles	1/6 to	1/2 to	1 to	
(blister)	1/3 oz	1 oz	2 b	
(cottonwood leaf) <sup>1</sup>				
(elm leaf)				
(flea)				
(fuller rose)				
(Japanese)				
(June)				
(willow leaf)				

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borers <sup>1</sup> :	1/3 oz	1 oz	2 b	1. For borers, apply Dursban 50W 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.
clearwing moths				
(ash)				
(dogwood)				
(lesser peachtree)				
(Elac)				
(oak)				
(rhododendron)				
metallic wood				
(bronze birch)				
(flatheaded appletree)				
(twolined chestnut)				
longhorned beetles				
(locust)				
(red oak)				
leafminers				
needleminers				
(Jeffrey pine)				
(lodgepole pine)				
(spruce)				
scale crawlers				
(cottonycushion)				
(cottony maple)				
(euonymus)				
(Fletcher)				
(Florida wax)				
(golden oak)				
(hemispherical)				
(lecanium)				
(magnolia)				
(oak kermes)				
(oystershell)				
(pine needle)				
(San Jose)				
(tea)				
(white birch)				
borers <sup>1</sup>	1 oz	3 oz	6 b	1. For peachtree borers, apply Dursban 50W 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.
(cottonwood)				
(peachtree)				
wood infesting beetles <sup>1</sup>	2 2/3 oz	8 oz	16 1/2 b	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.
(ambrosia)				
(Anobiidae)				
(black turpentine)				
(cottonwood leaf)				
(European elm bark)				
(native elm bark)				
(willow)				

<sup>†</sup>Superscripts refer to "Specific Directions".

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**Tree Pests (Nurseries, Plantations and Felled Trees)**

Use Dursban 50W to treat shade and flowering trees, plantation trees, transplant trees and evergreens found to be infested with pests listed in the following table. Felled trees should be treated as necessary. Dilute Dursban 50W 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 to 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.

**Attention:** For felled trees, treat after cutting. Do not handle until spray has dried, or wear protective clothing. Treat only fruit and nut trees identified in the "Tree Fruits and Nuts" section of this label.

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

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Pest†	Amount of Dursban 50W In Water to Make:			Specific Directions
	1 gal	3 gal	100 gal	
adelgids (cooley spruce gall) (eastern spruce gall) (pine bark)	1/12 oz	1/4 oz	1/2 lb	<p>1. For bagworms, treat when insects are in the crawler stage.</p> <p>2. For effective control of leafrollers, spray should be applied before leaves are tightly rolled.</p> <p>3. For 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.</p> <p>4. 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</p> <p>5. For effective control of fall webworm, direct spray into web and immediately surrounding foliage.</p> <p>6. If possible, locate carpenter ant nests and drench thoroughly.</p>
aphids (apple) (chrysanthemum) (cottonwood) (elm leaf) (peach) (rose) (spirea)				
bagworms <sup>1</sup>				
boxelder bugs				
cankerworms				
carpenter ants <sup>6</sup>				
catalpa sphinx				
citrus mealybugs				
clover mite				
elm spanworms				
fall webworms <sup>5</sup>				
fire ants				
green-striped mapleworms				
jackpine budworm				
juniper webworms				
katydids				
lace bugs				
leafhoppers				
leafrollers <sup>2</sup>				
maple leafcutter <sup>3</sup>				
mites <sup>4</sup> (red spider) (southern red)				
oak skeletonizer				
poplar tentmaker				
puss caterpillars				
rose chafer				
sawflies, exposed (pine) (pin oak)				
spring elm caterpillars				
spruce budworms				
tent caterpillars (eastern) (forest) (western)				
walnut caterpillars				
western spruce budworms				
yellownecked caterpillars				

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beetles	1/6 oz	1/2 oz	1 lb	<p>1. To reduce twig and branch feeding on uninfested trees deemed to be of high value, apply a 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.</p> <p>2. To control migrating and invading gypsy moth larvae, treat trunks and foliage.</p> <p>3. Blackvine weevils are night feeders. Late afternoon spraying will give control in some areas.</p>
(native elm bark) <sup>1</sup>				
leafhoppers				
mahogany webworms				
mealybugs				
mimosa webworms				
moths				
(browntail)				
(Cypress tip)				
(Douglas fir tussock)				
(European pine shoot)				
(gypsy) <sup>2</sup>				
(holly bud)				
(Nantucket pine tip)				
(Pandora)				
(pitch pine tip)				
(subtropical pine tip)				
(tussock)				
oakworms				
(California orangestriped)				
(redhumped)				
redhumped caterpillars				
thrips				
(exposed)				
weevils				
(blackvine) <sup>3</sup>				
(yellow poplar)				
(pine reproduction)				
foliar feeding beetles	1/6 to	1/2 to	1 to	
(blister)	1/3 oz	1 oz	2 lb	
(cottonwood leaf) <sup>1</sup>			<p>1. For cottonwood leaf beetles, use Dursban 50W in water to control larvae and adults infesting cottonwoods. Make the treatment when field counts indicate damaging beetle populations are developing or present. For seedlings, use 8 to 20 gallons spray volume per acre.</p>	
(elm leaf)				
(flea)				
(fuller rose)				
(Japanese)				
(June)				
(willow)				

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borers <sup>1</sup> :	1/3 oz	1 oz	2 b	<p>1. For borers, apply Dursban 50W 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.</p> <p>2. For cranberry girdler larvae infesting Douglas fir seedlings, apply 2 lb of Dursban 50W per acre. Direct spray at the lower crown and stems using 50 gallons of water per acre. Irrigate immediately after application for soil penetration of 1 to 2 inches. Treat after egg laying during the summer.</p>
clearwing moths (ash) (dogwood) (lesser peachtree) (lilac) (oak) (rhododendron) metallic wood (bronze birch) (flatheaded appletree) (twolined chestnut) longhorned beetles (locust) (red oak) Cranberry girdler larvae <sup>2</sup> leafminers needleminers (Jeffrey pine) (lodgepole pine) (spruce) scale crawlers (cottonycushion) (cottony maple) (euonymus) (Fletcher) (Florida wax) (golden oak) (hemispherical) (lecanium) (magnolia) (oak kermes) (oystershell) (pine needle) (San Jose) (tea) (white birch)				
borers	1 oz	3 oz	6 b	<p>1. For peachtree borers, apply Dursban 50W in water to flowering trees 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.</p>
(cottonwood) (peachtree) <sup>1</sup>				

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beetles <sup>1</sup> (elm leaf) (flea) (tulle rose) (native elm bark) <sup>2</sup> (willow leaf)	1 1/3 oz	4 oz	8 1/3 b	<p>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. For plantation trees, apply to individual trees using suitable hand- or power-operated spray equipment.</p> <p>2. To prevent native elm bark beetles from overwintering in uninfested trees, apply Dursban 50W 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. To reduce the twig and branch feeding on uninfested trees deemed to be of high value, apply a 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.</p>
beetles <sup>1</sup> (ambrosia) (Anobiidae) (black turpentine) (European elm bark) (Japanese) (June) (southern pine) (spruce)	2 2/3 oz	8 oz	16 2/3 b	<p>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 or before adult beetles begin to emerge. For plantation trees, apply to individual trees using suitable hand- or power-operated spray equipment.</p>
weevils <sup>1</sup> (northern pine) (pales) (pitch-eating) (twig)	5 1/3 oz	1 lb	33 1/3 b	<p>1. For southern pine seedlings, treat immediately after transplanting. Treat each seedling with enough spray to thoroughly wet the foliage and stems to the point of runoff but do not use more than 6 gallons of spray per acre.</p>

†Superscripts refer to "Specific Directions".

### Tree Fruits and Nuts

Use Dursban 50W at the dosages indicated by application as a foliar spray to control pests listed in the following table. Mix the required dosage of Dursban 50W in water. Spray for thorough and complete coverage of the foliage, using suitable hand- or conventional power- operated spray equipment. Treat when pests first appear or in accordance with local conditions. Consult your State Agricultural Experiment Station or Extension Service Specialist for specific use information. Do not allow livestock to graze in treated areas.

**Attention:** In California, do not work with or contact trees within 2 days after treatment.

Crop	Pest	Amount of Dursban 50W in Water to Make:			Specific Directions
		1 gal	3 gal	100 gal	
Apples	apple aphid	1 gal	3 gal	100 gal	Make no more than 8 applications per season. Do not apply last treatment within 28 days before harvest or apply last two treatments closer than 21 days apart.
	apple maggot				
	codling moth	1/2 oz	1 1/2 oz	3 lb	
	European apple sawfly				
	eyespotted bud moth				
	fruittree leafroller				
	green fruitworm				
	lesser appleworm				
	obliquebanded leafroller				
	orange tortrix				
	oriental fruit moth				
	pandemis leafroller				
	plum curculio				
	redbanded leafroller				
	rosy apple aphid				
	San Jose scale				
	tarnished plant bug				
	tufted apple budmoth				
	variegated leafroller				
	woolly apple aphid				
Almonds	navel orangeworm	2/3 oz	2 oz	4 lb	Make no more than 3 applications per season to almonds and filberts and no more than 2 applications per season to walnuts. Do not apply within 14 days before harvest.
	peach twig borer				
	San Jose scale				
Walnuts	codling moth	2/3 oz	2 oz	4 lb	
	walnut scale				
Pecans	black pecan aphid	1/3 oz	1 oz	2 lb	Make no more than 5 applications per season. Do not apply within 28 days of harvest. Do not allow livestock to graze in treated orchards.
	hickory shuckworms				
	pecan leaf scorch mite				
	pecan nut casebearer				
	pecan weevil <i>Phylloxera</i> spp.				



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