62719-255

Dursban\* 50W-N

In Water Soluble Packets

IM 19 ACCEPTED 60719-000

JUL - 8 1994 printed March 31, 1994

10470

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

## Current corrections to the 01/05/94 EPA-accepted copy include:

1. Correction of precautionary language: The statement, "May Be Fatal If Swallowed • Absorption Through Skin May Be Fatal • Causes Substantial But Temporary Eye Injury • Causes Skin Irritation

Do not get in eyes, on skin or clothing. Avoid breathing dust or spray mist. " was corrected to read

"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 or spray mist. Keep away from food, feedstuffs, and water supplies."

2. First Aid: Corrected "If Swallowed" statement to read "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 induce vomiting or give anything by mouth to an unconscious person."

3. Agricultural Use Requirements (Corrected list of PPE required for early entry): "Coveralis over short sleeved shirt and short pants, waterproof gloves, shoes plus socks and protective eyewear" was corrected to read "Coveralls, Waterproof gloves, shoes plus socks, and chemical-resistant headgear for overhead exposure".

4. Directions for Use Section: Typos and errors in rate tables were corrected. Certain explanatory text present in the parent label, Dursban 50W In Water Soluble Packets, and necessary for correct use of this product were restored.

5. Insects Controlled: Insect species present in the parent label, Dursban 50W In Water Soluble Packets, including Cottonycushion scale, browntail moth, flea beetle, and pecan weevil were added to the label for Dursban 50W-N

Changes in label for Dursban 50W-N included in EPA-accepted label dated 01/05/94: Dursban 50W-N for use by commercial growers of nursery and turf plants (product uses within the scope of the Worker Protections Standard) was accepted by EPA on 01/05/94. The following is a listing of revisions to Directions for Use section, compared to previously accepted label for Dursban 50W (62719-72):

Moved specific directions below rate tables as footnotes. Reduces massive size of tables and improves readability.

- A number of insect pests were added to this product label consistent with application methods, timing and application rates on other Dursban and Lorsban\* (chlorpyrifos) labels including deer tick, dearness scale, coffee root mealy bug, European pine sawfly, melon aphid, peach twig borer, white pine aphid, Zimmerman pine moth, balsam gall midge, balsam twig aphid, northern pine weevil, Taxus mealy bug, green June beetle grub and Asian wood cockroach.
- Specific directions for control of black turfgrass ataenius through adult management.
- Restructured Ornamentals use sections. Pests organized by general feeding type (sucking insects and mites; defoliators and leafminers; borers, bark beetles and weevils; ants, termites and miscellaneous pests) rather than by use rate alone.
- Omamental use rates expressed on a per acre basis as well as dilution per 100 gallons. Most nurseries and sod farms calibrate on a per acre basis.
- Recommended use of pheromone traps for detection and spray timing of clear wing moths borers.
- Deleted requirement in both turf and ornamental sections that sprays be applied with low pressure and coarse droplets. This does not reflect equipment used in nurseries and sod farms.
- Added use pattern for Pre-Plant Incorporation for field grown nursery stock.
- Restructured Residential Citrus section to expanded Fruit, Nut and Citrus not grown for commercials consumption. Fruit trees are often grown by commercial ornamental nurseries. •••••
- Excluded use on tree and forest pests. Duplication of Ornamentals use pattern existed for use sites other than forestry. Pests previously listed for forestry use but not for ornamentals were transferred to ornamentals section.
- 11. Excluded specific use on mosquitoes (including aerial applications) from this label. "Mewever mosquitoes were retained among pests controlled on turf and other outdoor use sites.
- 12. Perimeter use pattern was excluded from this label which is within the scope of WPS, WPS requirements are not compatible with this use site (perimeter use).

\*Trademark of DowElanco

(Container Label)

(Logo) DowElanco

# Dursban\* 50W-N In Water Soluble Packets

To be applied only by or under the direct supervision of trained applicators responsible for insect control programs.

Active Ingredient:

chlorpyrifos: O,O-diethyl O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate	50%
Inert Ingredients	50%
Total	100%

#### Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

WARNING

AVISO:

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 or spray mist. Keep away from food, feedstuffs, and water supplies.

# Personal Protective Equipment (PPE) Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

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.

## 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 induce vomiting or 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: thexposed, 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.

printed March 31, 1994

#### Environmental Hazards

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. 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.

## Agricultural Use Regulrements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to the label booklet under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

Refer to label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations, and Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. Before buying or using this product, read "Warranty Discialmer" and "Limitation of Remedies" inside label booklet.

In case of an 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 Reg. No. 62719-255

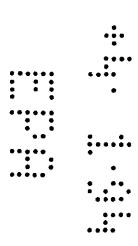
EPA Est.

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

Specialty Insecticide

Net Weight \_\_\_\_ lb



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page 3

(Label Booklet)

(Logo) DowElanco

# Dursban\* 50W-N In Water Soluble Packets

To be applied only by or under the direct supervision of trained applicators responsible for insect control programs.

# Keep Out of Reach of Children WARNING

AVISO:

printed March 31, 1994

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.)

Agricultural Use Requirements

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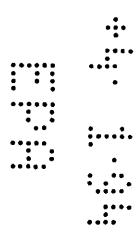
EPA Reg. No. 62719-255

**EPA Est. XXXXX-XX-XX** 

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Specialty Insecticide



(page 1 through end):

## Table of Contents

Page

**Precautionary Statements** 

Hazards to Humans and Domestic Animals

Protective Personal Equipment (PPE)

**User Safety Recommendations** 

First Aid

**Environmental Hazards** 

Directions for Use

Agricultural Use Requirements

Storage and Disposal

**General Information** 

Ornamentals (Outdoor)

Ornamentals (Dormant Spray of Tree Pests)

Ornamentals (Soil Treatment of Containerized or Balled and Burlapped Nursery Stock)

Ornamentals (Pre-Plant Incorporation Treatment of Field Grown Nursery Stock)

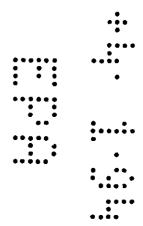
Fruit, Nut and Citrus Trees

Turf and Other Outdoor Uses

Warranty Disclaimer

Inherent Risks of Use

Limitation of Remedies



6.44

## Precautionary Statements

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# Personal Protective Equipment (PPE) Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
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- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

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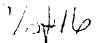
If In eyes: Flush with plenty of water for 5 minutes. Get medical attention if irritation persists.

If Inhaled: Remove to fresh air if symptoms of cholinesterase inhibition appear and get medical attention

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#### **Environmental Hazards**

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Gover 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.



#### Directions for Use

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

Read all Directions for Use carefully before applying.

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 exceptions 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
- Waterproof gloves
- Shoes plus socks
- Chemical-resistant headgear for overhead exposure

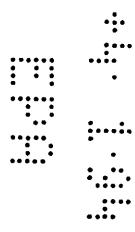
### STORAGE AND DISPOSAL

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 for extended periods of time. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below. Packets may become brittle when stored below 32°F. Handle carefully to avoid breakage.

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: When all packets are used, dispose of empty package in a sanitary landfill or by incineration or, if allowed by state and local authorities, by buring. If burned, stay out of smoke.



80716

## General Information

Dursban 50W-N In Water Soluble Packets 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-N 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: 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 or use hay for livestock bedding. Do not use in poultry houses.

## Handling Precautions for Water Soluble Packets

This canister contains eight 4 oz water-soluble packets. Do not allow packets to become wet prior to adding to the spray tank. Wear gloves when handling water-soluble packets. Do not handle with wet gloves. Do not handle water-soluble packets excessively since this may cause breakage. Reseal outer package to protect remaining packets. Packets may become brittle when stored below 32°F. Handle carefully to avoid breakage.

#### Mixing Directions

For paddle, sparger, and bypass agitation systems.

1. Fill the spray tank 1/3 full of water.

Note: For paddle agitation systems, paddles should be covered with water.

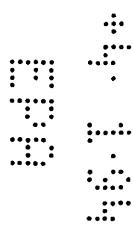
2. Activate agitation system.

3. Add required number of water-soluble packets to obtain desired dilution.

4. Complete tank filling while the packet(s) dissolve and Dursban 50W-N disperses.

5. Before beginning to spray, make sure water-soluble packet(s) have dissolved and Dursban 50W-N has completely dispersed.

**Note:** Depending on the water temperature and amount of agitation, the packets and Dursban 50W-N should be completely dispersed within approximately 5 minutes after adding to water.



1.7/16

# Approved Uses

# **Ornamentals Growing Outdoors or in Nurseries**

Use Dursban 50W-N insecticide to treat flowers, shrubs, evergreens, vines, shade and flowering trees, and non-bearing fruit trees found to be infested with the types of pests listed in the following tables including: (1) Sucking Insects and Mites; (2) Defoliators and Leafminers; (3) Borers, Bark Beetles and Weevils; and (4) Ants, Termites, and Miscellaneous Pests.

#### General Use Directions

Dilute Dursban 50W-N insecticide with water according to directions given in the table and apply using suitable hand or power-content operated spray equipment in a manner to provide complete and uniform coverage. Attempt to penetrate dense foliage, but avoid over spraying to the point of excessive runoff. When using spray equipment delivering less than 200 gallons of finished spray per acre, use the rate recommended in the per acre column. Uniform coverage is critical for effective insect control.

Note: Numbers in parentheses following a listed pest refers to Pest-Specific Directions following each table.

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

Note: Phytotoxicity: Environmental factors and varietal differences have significant effects on phytotoxic expression. Dursban 50W-N insecticide has been tested on numerous ornamental plants without causing serious phytotoxicity at recommended use rates. Before treating large numbers of plants, it is recommended that a small block of plants be sprayed and observed for 7 to 10 days to determine phytotoxic potential.

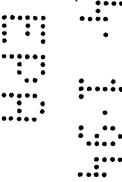
(1) Sucking Insects and Mites (Ornamentals Growing Outdoors or in Nurseries)

<u> </u>		Amount of Dursban 50W-N per	
Pest	100 gailons	Acre	
Adelgids (such as: Cooley and Eastern spruce galls, Pine bark)	0.5 to 1 lb	1 to 2 lb	
Aphids (Such as: Apple, Balsam twig, Black pecan,	(two to four 4 oz	(four to eight 4 oz	
Chrysanthemum, Cottonwood, Crape myrtle, Elm leaf, Melon, Peach, Rose, Spirea, White pine, Woolly apple. Yellow pecan)	packets)	packets)	
Boxelder bugs		ļ	
Lace bugs (such as: Hawthorn)			
Leafhoppers	1		
Periodical cicada	1		
Plant bugs		Í	
Psyllids Psy			
Spittlebugs			
Thornbug		1	
Whiteflies			
Leafhoppers	1 <b>b</b>	2 lb	
Mealybugs (Such as: Citrus, Taxus)	(four 4 oz	(eight 4 oz	
Mites (Such as: Clover, Red spider, Southern red) (1)	packets)	packets)	
Thrips (exposed)			
Scale insects (2) (Such as: Cottonycushion, Cottony maple,	2 <b>b</b>	2 to 4 lb	
Dearness, Euonymus, Fletcher, Florida wax, Golden oak,	(eight 4 oz	(eight to sixteen 4	
Hemispherical, Lecanium, Magnolia, Oak kermes, Oystershell,	packets)	oz packets)	
Pine needle, San Jose, Tea, White birch)			

#### Pest-Specific Directions

- 1. 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.
- 2. Time applications for control of scale insects when crawlers or first two stages of settled scales are present.

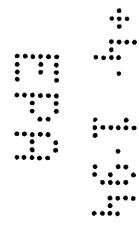




(2) Defoliators and Leafminers (Ornamentals Growing Outdoors or In Nurseries) Amount of Duraban 50W-N per Pest 100 gallons Acre Armyworms (Such as: Fail, Orange tortrix 0.5 to 1 lb 1 to 2 tb Yellowstriped) Poplar tentmaker (two to four 4 oz (four to eight 4 oz Bagworms (1) Puss caterpillers packets) packets) Cankerworms Rose chafers Sawflies, exposed (Such as: Catalpa sphinx Elm spanworms European pine, Pine, Pin oak, Fall webworms Redheaded) Grasshoppers Spring elm catepillers Greenstriped mapleworms Springtails Green fruitworms Spruce budworms Hornworms Tent caterpillers (Such as: Eastern, Forest, Western) Jackpine budworms Juniper webworms Walnut caterpillers Western spruce budworms Katydids Yellownecked caterpillers Leafrollers (2) Maple leafcutters (3) Oak skeletonizers Oleander caterpillers Balsam gali midge Mimosa webworms 1 lb 2 lb Beet armyworms Nantucket pine tip moth (four 4 oz packets) (eight 4 oz Oakworms (such as: California, Beetles (Such as: Fuller rose, packets) Orangestriped, Redhumped) Native elm bark) (5) Browntail moth Pandora moth Cutworms Pitch pine moth Redhumped caterpillers Cypress tip moth Douglas fir tussock moth Subtropical pine tip moth European pine shoot moth Tussock moth Gypsy moth (4) Holly bud moth Mahogany webworms Beetles (Such as: Cottonwood leaf, Elm leaf, Flea, Willow leaf) (6) 1 to 2 lb 2 lb (eight 4 oz (four to eight 4 oz packets) packets) 2 lb 2 to 4 lb Leafminers (eight 4 oz (eight to sixteen 4 Needleminers (Such as: Jeffrey pine, Lodgepole pine, Spruce) Pine needle midge packets) oz packets)

#### Pest-Specific Directions

- 1. For bagworms, treat when larvae are small and actively feeding.
- 2. For effective control of leafrollers, spray should be applied before leaves are tightly rolled.
- 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.
- 4. To control migrating and invading gypsy moth larvae, treat trunks and foliage.
- 5. To reduce twig and branch feeding by bark beetles, applications should be made in the spring or early summer.
- 6. For cottonwood leaf beetles, use Dursban 50W-N in water to control larvae and adults infesting cottonwoods. Make the treatment when field counts indicate damaging beetle populations are developing or present.



page 10

printed March 31, 1994

(3) Borers, Bark Beetles and Weevils (Ornamentals Growing Outdoors or in Nurseries)

	Amount of Dursban 50W-N per	
Pest	100 gallons	Acre
Weevils (such as: Blackvine (1), Cranberry girdler (2), Yellow poplar, Pine reproduction)	1 lb (four 4 oz packets)	2 to 4 lb (eight to sixteen 4 oz packets)
Borers (3): Clearwing moths (Such as: Ash, Dogwood, Lesser peachtree, Lilac, Oak, Peachtree, Rhododendron), Metalic wood (Such as: Bronze birch, Flatheaded appletree, Twolined chestnut), Longhorned beeties (Such as: Cottonwood, Locust, Red cak) Pales weevil adults Zimmerman pine moth	2 tb (eight 4 oz packets)	<u>-</u>
Pales weevil (4) Northern pine weevil (4)	6 lb (twenty-four 4 oz packets)	<del>-</del>
Beetles (Such as: Ambrosia, Anobildae, Black turpentine, Blister, Cottonwood leaf, Elm leaf, European elm bark, Fuller rose, Japanese, June, Mountain pine, Native elm bark, Southern pine, Spruce, Western pine, Willow leaf) (5)	16 lb (sixty-four 4 oz packets)	-
Weevils (Such as: Northern pine, Pitch eating, Twig) (6)	32 lb (cne hundred twenty-eight 4 oz packets)	-

#### Pest-Specific Directions

- 1. Blackvine weevils are night feeders. Late afternoon spraying will give control in some areas.
- 2. For cranberry girdler terves infesting Douglas fir seedlings, direct spray at lower crown and stems following egg laying during summer. Apply a minimum of 50 gallons of dilute spray per acre and irrigate immediately after application to move the insecticide into the top 1 to 2 inches of soil.
- 3. For borers, spray trunks and lower limbs of trees and shrubs when adults begin to emerge. For peachtree borers, spray flowering trees and shrubs of the genus *Prunus* as a trunk spray before newly-hatched larvae enter the trees and thoroughly wet all bark areas from ground level to scaffold limbs. Pheromone traps may aid in detection of adult clearwing moths. Consult your State Agricultural Experiment Station or Extension Service specialist for proper time to treat.
- 4. For centrol of pales and northern pine weevil larvae, apply as a cut stump spray or drench.
- For preventive treatment, spray the main trunk of trees in the early spring or when threat of attack exists from nearby infested trees. For remedial treatment, spray the main trunk of infested trees or logs when damage occurs but before adult beetles begin to emerge.
- 6. For pine seedlings, treat immediately after transplanting. Treat each seedling with enough spray to thoroughly wet the foliage and stems to the point of runoff. Do not use more than 6 gallons of spray dilution per acre.

(4) Ants, Termites, and Miscellaneous Pests (Ornamentals Growing Outdoors or in Nurseries)

	Amount of Dursban 50W-N pe	
Pest	100 gallons	Acre
Ants Cockroaches (Such as: American, Asian wood, Brownbanded, German, Oriental, Smokey brown) Fire ants (foraging workers) Fire ants (mounds) (1) Sowbugs Springtails	1 lb (four 4 oz packets)	2 lb (eight 4 cz packets)
Carpenter ants (2) Termites	16 lb (sixty-four 4 oz packets)	

## Pest-Specific Directions

- 1. For individual fire ant mounds apply Dursban 50W-N insecticide as a drench. Dilute 0.7545 of Dursban 50W-N (three 4 oz packets) per 50 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding areas to a 2 foot diameter. 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.
- 2. If possible, locate carpenter ant nests and drench thoroughly.

printed March 31, 1994

## Ornamentals (Dormant Spray of Tree Pests)

Use Dursban 50W-N insecticide as a dormant or delayed dormant spray at the rates indicated to control the listed insects.

Pest	Amount of Dursban 50W-N per 100 gallons <sup>1</sup>
Aphids (Such as: Mealy plum, Rosy apple, Woolly apple) Borers (such as: Peach twig) Cutworms (Such as: Climbing) Leafrollers (Such as: Obilque banded, Pandemis) Pear psylla adults Scale insects (Such as: San Jose)	0.5 to 1 lb (two to four 4 oz packets)

Based on 200 to 600 gallons per acre as a dilute spray.

#### General Use Directions

While Dursban 50W-N insecticide may be used without oil, oil is recommended to control additional pests such as European red mite.

For high volume (dilute) sprays, tank mix the specified dosage with 1 to 2 gallons of a petroleum spray oil recommended for dormant use in 100 gallons of water. Spray the entire tree to runoff using suitable ground spray equipment.

For low volume (concentrate) sprays (less than 2 - 2 gallons of spray mixture per acre), use the same amount of Dursban 50W-N insecticide as for a dilute spray and apply in a manner that will ensure thorough coverage of the trees. Use oil as recommended by your State Agricultural Experiment Station or Extension Service Specialist.

Precautions: Because cold dry conditions may cause Dursban 50W-N insecticide plus oil to infuse trees resulting in bud damage or drop, do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated. Do not use more than 4 lb (sixteen 4 oz packets) of Dursban 50W-N insecticide per acre.

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

## Ornamentals (Soil Treatment of Containerized or Balled and Burlapped Nursery Stock)

Use Dursban 50W-N insecticide to treat containerized (potted) or balled and burlapped nursery stock to control the listed soil insects.

Pest	Amount of Dursban 50W-N per 100 gallons
Fire ants(1)	0.25 lb (one 4 oz packet)
Black vine weevils (2) Coffee root mealybug (2) White grubs (2) White fringed beetles (2)	4 lb (sixteen 4 oz packets)

#### General Use Directions

Completely submerge the container or ball of soil in a tank containing diluted Dursban 50W-N insecticide. Do not remove burlap wrap or containers with drain holes prior to submerging. Keep soil submerged until complete saturation has occurred, normally about 30 seconds. Note: Numbers in parentheses following a listed pest refers to Pest-Specific Directions.

#### Pest-Specific Directions

- 1. An alternative treatment to submerging containerized or balled and burlapped plants is to drench title soil ball or container with the diluted insecticide solution to the point of runoff on a twice-daily schedule for three-carsecutive days. Do not remove burlap wrap or container from plants prior to treatment.
- 2. An alternative treatment to submerging containerized plants is to drench the container with the diluted insecticide solution applying approximately 10 to 12 oz of diluted insecticide solution per gallon of containers see solution.



page 12

printed March 31, 1994

# Ornamentals (Pre-Plant Incorporation Treatment of Field Grown Nursery Stock)

Apply Dursban 50W-N insecticide to soil and incorporate before transplanting or planting to control white grubs and larvae of the black vine weevil during transplant or seedling establishment. Apply to the soil surface as a broadcast spray at a rate of 8 pounds per acre (thirty-two 4 oz packets) using sufficient water to obtain adequate coverage. Do not aerially apply. On the same day of the treatment, incorporate the insecticide into the top 2 to 4 inches of the soil using a tandem disc, field cultivator or equivalent incorporation equipment capable of thorough soil mixing.

## Fruit, Nut and Citrus Trees

Use Dursban 50W-N insecticide to treat apple, almond, charry, filbert, grapefruit, temon, nectarine, pecan, peach, plum, prune and walnut trees or tree fruit not grown for commercial consumption which are infested with pests listed in the following table.

		Amount of Dursban 50W-N per	
Pest		100 gallons	Acre
Aphids (Such as: Apple, Black cherry, Black pecan, Filbert, Rosey apple, Woolly apple, Yellow pecan) Apple Magget Borers (Such as: American plum, Dogwood, Lesser peachtree, Pacific flathead, Peach twig, Peachtree, Shothole) Cherry fruit fly Climbing cutworm Codling Moth European apple sawfly Eyespotted bud moth European corn borer Fall webworm Filbert worm Grasshoppers (1) Green fruitworm Hickory shuckworm Katydids Leaf rollers and tiers (Such as: Avacado leafroller, Filbert leafroller, Oblique banded leafroller, Omnivorous leaftier, Orange tortrix, Pandemis leafroller, Redbanded leafroller, Variegated leafroller)	Lesser appleworm Mineola Moth Mites (2) (such as: European red, Pecan leaf scorch, Two spotted spider) Navel orangeworm Oriental fruit moth Pecan nut casebearer Pecan weevil Periodical cicada Phylloxera spp. Plum curculio Potato leafhopper Rose chafer Scale insects (such as: San Jose, Walnut, European fruit lecanium) Spitt!ebug Spotted tentiform leafminer Stinkbug Tarnished plant bug Tufted apple budmoth Walnut husk fly Western tussock moth White apple leafhopper Winter moth	2 lb (eight 4 oz packets)	2 to 4 b (eight to sixteen 4 oz packets)
Scale insects (3) (Such as: Black	scale, Brown soft scale, California ow scale, Chaff scale, Purple scale,	4 b (sixteen 4 oz packets)	4 to 8 lb (sixteen to thirty- two 4 oz packets)

#### General Use Directions

A petroleum spray oil recommended for use on citrus trees may be added to spray mixtures only at rates of water 1.8 gallons per 100 gallons of water to improve control of aphids, mealybugs, scale insects, and thripse Treat when ansects become a problem or in accordance with the local spray schedule recommended by your State Extension Service Specialist. Note: Numbers in parentheses following a listed pest refers to Pest-Specific Directions.

#### Precautions

Do not apply as a foliar spray to sweet cherries. Contact of spray solution with leaves may result in premixture leaf drop. Observe local use directions for tank mix combinations especially in regard to applications of Dursban 50W-N plus spray oil. Do not apply Dursban 50W-N insecticide in combination with oil to walnuts. Dry or cold conditions cause Dursban 50W-N insecticide plus oil to infuse trees resulting in bud damage or drop, do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated. Do not apply when trees are stressed by drought or if temperature exceeds 95° F.

#### Pest-Specific Directions

- 1. Lubber grasshoppers must be controlled when they are small (less than 1 inch in length) by direct contact with spray.
- 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.
- 3. For control of Black scale, Brown soft scale, California red scale, and Chaff scale in Arizona, California and Texas, apply 8 lb (thirty-two 4 oz packets) of Dursban 50W-N per acre (8 lb/100 gal).

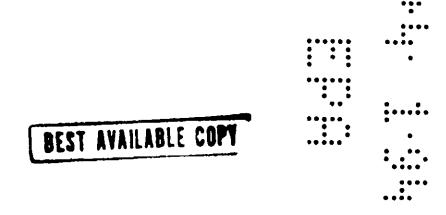
## **Turf and Other Outdoor Uses**

Use Dursban 50W-N insecticide to control the pests listed in the following table by application at the recommended dosages.

Pest		Amount of Dursban 50W-N per Acre
Ants Armyworm (such as: Beet, Fall, Yellowstriped) Chiggers (1) Chinch bugs Crickets Cutworms Deer ticks (2) Earwigs European crane fly larvae Fiery skipper Fire ants (foraging workers) Fire ants (mounds) (3) Fleas	Grasshoppers Greenbugs Green June beetle grubs Leafhoppers Lucerne moth Millipedes Mites (Such as: Clover, Bermudagrass stunt, Winter grain) Mosquitoes (4) Pillbugs Sod webworms (lawn moths) (5) Sowbugs Springtails Ticks (1)	2 lb (eight 4 oz packets)
Billbugs (Such as: Bluegrass, Der	nver, Hunting) (6)	2 to 4 lb (eight to sixteen 4 oz packets)
Black turfgrass ataenius (7)		4 lb
Annual bluegrass weevil (Hyperoc	des) (8)	(sixteen 4 oz packets)
Mole Crickets (9)		4 to 6 lb (sixteen to twenty four 4 oz packets)
White grubs (Such as: Black turfo Southern masked chafer and Ja		4 to 8 lb (sixteen to thirty-two 4 oz packets)
Imported fire ants in commercial s	od (11)	16 lb (sixty-four 4 oz packets)

#### General Use Directions

Dilute Dursban 50W-N insecticide in water and apply using suitable application equipment. For best results, turl should be moist at time of treatment. Note: Numbers in parentheses following a listed pest refers to Pest-Specific Directions.



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### Pest-Specific Directions

- 1. Use Dursban 50W-N insecticide for area control of ticks and chiggers infesting non-cropland areas such as roadsides, footpaths and trails, picnic and camping site, 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-N insecticide in water at the rate of 0.25 lb per acre (one 4 oz packet) using a hydraulic sprayer, mist applicator, backpack sprayer, or other suitable hind or power operated spray equipment.
- 2. For control of deer ticks apply Dursban 50W-N insecticide in water at the rate of 2 lb per acre (eight 4 oz packets). Treat low underbrush, turf, grassy areas, weeds, ground surface and debris, using enough spray volume to obtain thorough coverage.
- 3. For individual fire ant mounds apply Dursban 50W-N insecticide as a drench. Dilute 0.75 lb Dursban 50W-N (three 4 oz packets) per 50 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding areas to a 2 foot diameter. For best results, apply in cool weather, 6S-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.
- 4. Mosquitoes coming to rest on areas treated for control of turf pests will be controlled for varying periods of time after treatment depending on exposure of treated areas to weathering conditions.
- 5. For sod webworms, delay watering or mowing of the treated area for 12 to 24 hours after treatment.
- 6. For **billbugs**, spray early in the season just prior to, or coinciding with first appearance of adults as recommended by your local Agricultural Extension Service Specialist.
- 7. For black turfgrass ataenius adults, spray early in the season as recommended by your local Agricultural Extension Service Specialist. A repeat application may be needed 1 to 2 weeks later.
- 8. To control annual bluegrass weevil, spray suspected problem areas in mid-April and again in Mid-May, or as recommended by your local Agricultural Extension Service specialist.
- 9. To control mole crickets in turfgrass, apply Dursban 50W-N insecticide in a minimum spray volume of 50 gallons of water per acre using broadcast or suitable hand held application equipment. Apply when early stage nymphs are active. Efficacy may be enhanced by spraying late in the afternoon or early evening and irrigating the turf prior to treatment to move mole crickets to the soil surface.
- 10. 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 best results, soil should be moist prior to treatment. For best results, immediately after spraying, irrigate the treated area with 1/2 to 1 lnch of water to wash the insecticide into the underlying soil.
- 11. Imported fire anta: Apply Dursban 50W-N as a spray to the area of sod to be cut. Immediately after application, irrigate treated area 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.

**Preceution**: 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.

#### Warranty Disclaimer

DowElanco 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, subject to the inherent risks set forth below. DOWELANCO MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to laber instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions setce), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other interials, the manner of application, or other factors, all of which are beyond the control of DowElanco or the sellar. All such risks shall be assumed by Buyer.

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## Limitation of Remedies

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at DowElanco's election, one of the following:

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

(2) Replacement of amount of product used.

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

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