

100-460

3-29-2002

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	United States <b>Environmental Protection Agency</b> Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number <b>NOTIFICATION</b>
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**Application for Pesticide - Section I**

1. Company/Product Number 100-460	2. EPA Product Manager Mr. LaRocca	3. Proposed Classification  <input type="checkbox"/> None <input checked="" type="checkbox"/> Restricted
4. Company/Product (Name) D-z-n® Diazinon 50W	PM 13	
5. Name and Address of Applicant (Include ZIP Code) Novartis Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419  <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____ Product Name _____	

**Section - II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____	<b>NOTIFICATION</b>  MAR 29 2002 <i>lc</i>
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.)  
 This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

The current EPA-approved label includes directions for use on plums. Although prunes are dried plums and the existing directions for use would cover application to prune type plums, we clarified the directions for use by revising "Plums" to "Plums/Prunes. The new label code is SCP 460A-L2W 0202.

**Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
*Certification must be submitted		If "Yes" Unit Packaging wgt. No. per Container	If "Yes" Unit Packaging wgt. No. per container		
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled					

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Carolyn F. Brinkley	Title Sr. Regulatory Product Manager	Telephone No. (Include Area Code) 336-632-2838
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature <i>Carolyn F. Brinkley</i>	3. Title Sr. Regulatory Product Manager	
4. Typed Name Carolyn F. Brinkley	5. Date March 20, 2002	

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**RESTRICTED USE PESTICIDE**

DUE TO AVIAN AND AQUATIC TOXICITY  
FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR  
PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE  
USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

**D·z·n<sup>®</sup> diazinon**  
**50W**

**INSECTICIDE**

For control of certain insects and mites on  
fruits, nuts, vegetables, field crops, and  
ornamentals grown outdoors in nurseries.  
For specific pests, refer to use directions.

**5 pounds**

U.S. Standard Measure

Active Ingredient:	
Diazinon (CAS No. 333-41-5) . . . . .	50.0%
Other Ingredients:	50.0%
Total:	100.0%

D·z·n diazinon 50W is a wettable powder.

EPA Reg. No. 100-460

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements  
and directions for use inside booklet.

**SCP 460A-L2W 0202**



**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

**NOTIFICATION**

**MAR 29 2002**

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# D-z-n® diazinon 50W

## DIRECTIONS FOR USE

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

**Reformulation or repackaging of this product is prohibited.**

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap since crop or plant injury may result.

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.** Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.**

## GENERAL INFORMATION

D-z-n diazinon 50W is a wettable powder which, when diluted with water according to the directions, is intended for control of insect pests of agricultural crops and other plants. Do not use this product in greenhouses, dwellings, or barns. Do not use on livestock.

In the directions for use which follow, best control is obtained when application is made at first sign of pests. Application should be repeated only as directed to maintain control.

## WORK SAFETY RULES

**REPEATED EXPOSURES TO CHOLINESTERASE INHIBITORS SUCH AS ARE CONTAINED IN THIS PRODUCT MAY, WITHOUT WARNING, CAUSE PROLONGED SUSCEPTIBILITY TO VERY SMALL DOSES OF ANY CHOLINESTERASE INHIBITOR.**

When handling D-z-n diazinon 50W, do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See **First Aid** section of this label.

**Note:** The California Department of Agriculture has set a 5-day reentry period for diazinon on grapes, peaches, and nectarines. Five days should elapse between the time of application and the time a worker may enter the field to engage in any activity requiring substantial contact with treated foliage. When a mixture of two or more organophosphate pesticides are applied in combination, the interval should be prolonged by adding to the largest applicable interval an additional 50% of that interval.

## SPRAY EQUIPMENT

Applications of D-z-n diazinon 50W using sufficient water volume to provide thorough and uniform coverage generally provide the most effective pest control.

To avoid spray drift, do not apply when conditions favor drift from beyond the target area. Avoid overlap because crop injury may occur.

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate sprayer before use.

For more information on spray equipment and calibration, consult sprayer manufacturer's and state recommendations. For specific local directions and spray schedules, consult your local or state agricultural authorities.

## MIXING PROCEDURES

Thoroughly clean spray equipment before using this product. Prepare only the amount of spray mixture needed for the immediate application. Vigorous agitation is necessary for proper dispersal of this product. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand in the spray tank overnight. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

### 1. D-z-n diazinon 50W Alone:

Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the D-z-n diazinon 50W to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the D-z-n diazinon 50W has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

### 2. D-z-n diazinon 50W In Tank Mixtures:

**Note: Do not mix D-z-n diazinon 50W with any formulation of Captan or Captec because crop injury may occur.**

D-z-n diazinon 50W is compatible with most insecticide and fungicide products; however, physical compatibility with tank mix partners should be tested before use. Using a quart jar, add the proportionate amounts of each product to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be readily remixed, the products are compatible.

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Once compatibility has been proven, add 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. Add tank mix partners in this order: all products in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, and emulsifiable concentrates. Always allow each tank mix partner to fully disperse before adding the next product. Maintain sufficient agitation while adding the remainder of the water and until all of the mixture has been applied.

When using D-z-n diazinon 50W in tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product's label. Confirm that the tank mixture is safe to the crop by spraying a small area first, and evaluating crop safety after an appropriate period. Do not treat larger areas until crop safety has been confirmed.

### AERIAL APPLICATION

Avoid application when uniform coverage will not result or when excessive spray drift may occur. Do not allow product to contact animals or unprotected persons.

### CHEMIGATION (APPLICATION THROUGH AN IRRIGATION SYSTEM)

D-z-n diazinon 50W may be applied alone or in combination with other pesticides registered for application through sprinkler (including center pivot, lateral move, end four side (wheel) roll, traveler, big gun, solid set, or hand move) or drip (trickle) irrigation systems (including surface and subsurface). Do not apply this product through any other type of irrigation system. To insure compatibility, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for 5 minutes. If the combination remains mixed, or can be remixed readily, the mixture is compatible.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect the irrigation system used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments, if the need arises.

#### Chemigation System Connected to Public Water Systems

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily, at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

#### Sprinkler and Drip (Trickle) Chemigation

1. The system must contain a functional check-valve, a vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not use sprinkler chemigation when wind speed favors drift beyond the area intended for treatment.

#### Operating Instructions

1. Determine the acreage to be treated by the sprinkler system.
2. Measure the appropriate amount of D-z-n diazinon 50W needed to treat the acreage to be treated. Refer to the specific directions for use for the application rate and the amount of water per acre.
3. Add the pre-measured D-z-n diazinon 50W to the chemigation system supply tank and dilute with water if needed. Constant agitation is required to keep the product in solution when D-z-n diazinon 50W is used alone or tank mixed with other pesticides registered for sprinkler or drip chemigation.
4. Start the irrigation system and bring the system up to full pressure, making certain that all sprinkler heads are functioning properly.
5. Engage the chemigation injection or venturi system to add the D-z-n diazinon 50W to the irrigation lines.
6. Continue to run irrigation system for a few minutes after supply tank is empty to allow material in the irrigation lines to reach the sprinkler heads furthest from the chemigation injection point.

**Note:** When treatment with D-z-n diazinon 50W has been completed, further field irrigation over the treated area should be avoided for 48 hours to prevent washing the product off of the crop.

Apply D-z-n diazinon 50W only in sufficient irrigation water to achieve thorough plant coverage. Excess water will wash the product from the plant, resulting in poor control.

To avoid a hazard to animals, wells, or adjoining crops, do not allow irrigation water to collect or runoff.

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## D-z-n® diazinon 50W

### FRUIT AND NUT CROPS

#### REI – 24 Hours

D-z-n diazinon 50W may be applied using ground or aerial application equipment as specified in the following table. This table also indicates the **minimum** amount of water that can be used for the various methods of application. The rate of D-z-n diazinon 50W for aerial spray or concentrated spray applied by ground equipment is based on a dilute full cover spray applied to fruit or nut trees with conventional ground equipment at a rate of 300-400 gals. of water per acre. The specific amount of product to be used appears under the separate directions for use for each crop. (Note: "lbs." or "lbs. of product" in the directions means pounds of this product, not pounds of active ingredient.) If the Rate calls for 1 lb. of D-z-n diazinon 50W per 100 gals. of water, this amounts to 3-4 lbs. of product per acre when applied to fruit trees at usual dilute ground spray volumes of 300-400 gals. of water per acre. In no case should the amount of product used per acre exceed the maximum amount per acre per application that is specified in the directions for use for individual crops.

Crop	Aerial Application Minimum Gals./Acre	Ground Application Minimum Gals./Acre	
		Dilute	Concentrate
Almonds*	20	100	20
Apples	20	100	20
Apricots	20	100	20
Blackberries**	20	100	20
Blueberries	20	100	20
Boysenberries**	20	100	20
Cherries	20	100	20
Cranberries	20	15	—
Dewberries**	20	100	20
Grapes	20	100	20
Loganberries**	20	100	20
Nectarines	20	100	20
Peaches	20	100	20
Pears	20	100	20
Pineapple	20	200	—
Plums/Prunes	20	100	20
Raspberries**	20	100	20
Strawberries	20	100	20
Walnuts*	20	100	20

\*CA only.

\*\*CA, OR, or WA only.

Observe stated time intervals between last application and harvest, as well as intervals between applications and total number of applications that can be made per season.

Crop	PHI*
Almonds	**
Apples	21
Apricots	21
Blackberries	7
Blueberries	7
Boysenberries	7
Cherries	21
Cranberries	7
Dewberries	7
Grapes	28
Loganberries	7
Nectarines	21
Peaches	21
Pears	21
Pineapple	7
Plums/Prunes	21
Raspberries	7
Strawberries	5
Walnuts	45

\*PHI = Pre-Harvest interval or the number of days to wait between the last application and harvest.

\*\* = Dormant spray only.

**Note:** To protect bees, do not apply this product to fruit trees when the trees or substantial numbers of weeds in the orchard are in bloom.

D-z-n® diazinon 50W

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Crop	Pests	Rate	Timing/Special Directions
Almonds (CA only)	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1-1½ lbs. + 2-3 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water	Apply only as a single dormant spray. Do not apply more than 6 lbs. of product or 9 gals. of oil per acre.
Apples	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1 lb. + 2 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water	Apply as a dormant or delayed dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre.
	Leafhoppers	1 lb. in 100 gals. of water	Apply, beginning at petal fall, as infestations develop. Repeat application in 14 days, if necessary.
	Eyespotted Bud Moths, Fruit Tree Leafrollers, Mealybugs	1 lb. in 100 gals. of water	Make 3 cover sprays, beginning at pink stage. Do not repeat application closer than 14 days.
	Codling Moths, Rosy Apple Aphids, Green Apple Aphids, Woolly Apple Aphids, Spider Mites	1 lb. in 100 gals. of water	Make 3 cover sprays beginning when infestations occur. Do not repeat applications closer than 14 days. <b>Note:</b> Mites will be suppressed if diazinon is used in the regular cover spray program. Slight russeting may occur on some varieties of apples, such as Golden Delicious.
	Apple Maggots	1 lb. in 100 gals. of water	Make 3 cover sprays when flies are active and laying eggs. Do not repeat applications closer than 14 days. <b>Note:</b> Diazinon may not control organophosphate-resistant apple maggots.
	San Jose Scale Crawlers, Forbes Scale Crawlers	1 lb. in 100 gals. of water	Apply early in the season when crawlers first appear. If infestation warrants, make a second application 14 days later.

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Apricots	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1 lb. + 2 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre.
	Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers	1 lb. in 100 gals. of water	Apply as infestations occur. Repeat application after 14 days, if necessary.
	Olive Scale Crawlers	½ lb. + 1½ gals. of light medium horticultural oil in 100 gals. of water	Apply when scale crawlers are present. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre per application.
	Apricot Mealybugs	1 lb. in 100 gals. of water	Apply as a cover spray from petal fall to June. Allow 14 days between applications.

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Blueberries	Cranberry Fruitworms, Cherry Fruitworms, Blueberry Maggots, Aphids, Thrips, Two-spotted Spider Mites	2 lbs./A	Apply as infestations occur. Allow 14 days between applications.
	Fire Ants	2 lbs./A	To aid in the control of fire ants, slowly apply 1 gal. of diluted mixture over and 6 inches around each fire ant mound. Apply gently to avoid disturbing ants. Use equipment capable of delivering the diluted product as a gentle rain. High pressure sprays may disturb the ants and cause migration, reducing product effectiveness. <b>Note:</b> For best results, apply in cool weather, 65-85°F, or in early morning or late evening hours.

**Notes:** (1) Do not apply more than 2 lbs. of product per acre per application and no more than 10 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest.

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Crop	Pests	Rate	Timing/Special Directions
Caneberries CA, OR, and WA only: Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries	Leafhoppers, Thrips, Aphids, Two-spotted Spider Mites, Raspberry Fruitworms	2 lbs./A in a minimum of 100 gals. of water (200 gals. of water maximum)	Apply as insects occur. Repeat application after 14 days, if necessary.  For raspberry fruitworms, make one application when blossom buds separate. Make a second application immediately before blossoms open.
	Dryberry Mites	2-4 lbs./A in a minimum of 100 gals. of water	Apply as a dormant spray in the early Spring, when canes are still on the ground and buds are closed. Make a second application when buds are well developed but still closed.
	Raspberry Crown Borers (Raspberry Root Borers)	4 lbs./A in a minimum of 100 gals. of water	Apply as a drench to the crown and lower canes in the Spring before buds break.

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 10 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest.

Cherries	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1 1/4 lbs. + 3 gals. dormant oil or 1-1 1/2 gals. superior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre.
	Eyespotted Bud Moths, Fruit Tree Leafrollers	1 lb. in 100 gals. of water	Apply as infestations occur, beginning at petal fall. Repeat application after 7 days, if necessary.
	Leafhoppers	1 lb. in 100 gals. of water	Make 3-4 applications beginning at petal fall and continuing through the growing season as infestations occur. Allow 7 days between applications.
	Cherry Fruitflies	1/2-1 lb. in 100 gals. of water	Make 3-4 applications beginning when adult flies begin to emerge and repeating at 10-day intervals.
	Black Cherry Aphids	1 lb. in 100 gals. of water	Apply as a cover spray when aphids appear. Repeat application after 10 days, if necessary.
	San Jose Scale Crawlers	1 lb. in 100 gals. of water	Apply during the pre-pink stage or when crawlers first appear.
	Cherry Rust Mites	1/2-1 lb. in 100 gals. of water	Apply as a single supplemental spray to trees after harvest.

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per year. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Cranberries	Blackheaded Fireworms ( <i>Rhopobota naevana</i> )	4 lbs.	Apply to larval stage. Pheromone trap captures and sweep monitoring may be used to optimize treatment timing. Repeat application after 14 days, if necessary. A maximum of 6 applications per season is permitted.
	Cranberry Tipworms	4 lbs.	Presence of damage is not an indicator of active infestation. For best results, target early-stage larvae. Repeat application after 14 days if necessary. A maxi- mum of 6 applications per season is permitted.
	Cranberry Fruitworms	4-6 lbs./A	Cranberry growth stage and/or berry inspection for eggs may be used to optimize treatment timing; consult your local extension agent or pest management advisor. Repeat application every 14 days, as needed. A maxi- mum of 4 applications per season is permitted for the 6 lb. rate. A maximum of 6 applications per season is permitted for the 4 lb. rate.

**Notes:** (1) This product may be applied to cranberries via ground, aerial, or sprinkler irrigation. For ground application, apply the product in a minimum of 15 gals. of water per acre; for aerial application, a minimum of 20 gals. of water per acre; for chemigation, up to 400 gals. of water per acre. Refer to the **Chemigation** section of this label for specific chemigation directions. (2) Do not use water from irrigated or flooded cranberry beds for drinking purposes or to irrigate crops other than those appearing on EPA-approved diazinon labels. (3) Do not apply more than 24 lbs. of product per acre per season. (4) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest.

Grapes	Pacific Spider Mites, Leafhoppers, Grape Berry Moths, Grape Leafrollers, Omnivorous Leafrollers, Aphids, Spider Mites	1-2 lbs./A in a minimum of 100 gals. of water (200 gals. of water maximum)	Apply as a thorough cover spray when pest appears. Repeat application after 7 days, if necessary.
	<i>Drosophila</i> spp.	6 oz./A in a minimum of 100 gals. of water (300 gals. of water maximum)	Apply as a thorough cover spray when pest appears. Repeat applications after 7 days, if necessary.

**Notes:** (1) Do not apply more than 2 lbs. of product per acre per application and no more than 10 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 28 days between the last application and harvest.

**D-z-n® diazinon 50W**

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<b>Crop</b>	<b>Pests</b>	<b>Rate</b>	<b>Timing/Special Directions</b>
Nectarines	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, European Red Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1 lb. + 2-3 gals. of dormant oil or 1-1½ gals. superior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre.
	Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers	1 lb. in 100 gals. of water	Apply as infestations occur. Repeat application after 7 days, if necessary.
	Peach Twig Borers, Parlatoria Scale	1 lb. + 1 gal. light medium summer horticultural oil in 100 gals. of water	Apply at petal fall. Do not apply more than 4 lbs. of product or 4 gals. of summer oil per acre.
	Olive Scale Crawlers	½ lb. + 1½ gals. light medium horticultural oil in 100 gals. of water	Apply as insects occur. Do not apply more than 4 lbs. of product or 4 gals. of summer oil per acre per application. Allow 7 days between applications.
	Oriental Fruitmoths	1 lb. in 100 gals. of water	Apply at 100% petal fall. Make 2 additional applications at 10 to 15-day intervals. Time the last application to peak adult flight.

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Peaches	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1 lb. + 2-3 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre.
	Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers	1 lb. in 100 gals. of water	Apply as infestations occur. Repeat application after 14 days, if necessary.
	Peach Twig Borers, Parlatoria Scale	1 lb. + 1 gal. light medium summer horticultural oil in 100 gals. of water	Apply at petal fall. Do not apply more than 4 lbs. of product or 4 gals. of oil per acre.
	Olive Scale Crawlers	½ lb. + 1½ gals. light medium horticultural oil in 100 gals. of water	Apply as insects occur. Do not apply more than 4 lbs. of product or 4 gals. of summer oil per acre per application. Allow 7 days between applications.
	Oriental Fruit Moths	1 lb. in 100 gals. of water	Apply at 100% petal fall. Make 2 additional applications at 10 to 15-day intervals. Time the last application to peak adult flight.
	Peach Twig Borers	1 lb. in 100 gals. of water	Apply as insects occur in May and June. Allow 7 days between applications.
	Leafhoppers	1 lb. in 100 gals. of water	Make 3-4 applications, beginning at petal fall and continuing through the growing season. Allow at least 7 days between applications.
	White Peach Scale	1½-2 lbs. in 100 gals. of water	Apply post harvest, timed to coincide with peak crawler and immature scale activity. Under conditions of heavy infestation, 2 applications (7 days apart) may be needed.

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Pears	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Pear Leaf Blister Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1 lb. + 2-3 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre.
	Pear Psylla	½-1 lb. in 100 gals. of water	Apply as a cover spray at pre-pink stage. Make 1-2 additional applications during the first and second cover sprays, if necessary. Allow at least 14 days between applications.

*continued...*



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Crop	Pests	Rate	Timing/Special Directions
Pears (continued)	Tentiform Leafminers, Mealybugs	1 lb. in 100 gals. of water	Make 3 cover sprays, beginning in April. Allow at least 14 days between applications.
	Codling Moths, Rosy Apple Aphids, Green Apple Aphids, Woolly Apple Aphids, Spider Mites	1 lb. in 100 gals. of water	Make 3 cover sprays, beginning as infestations occur. Allow at least 14 days between applications. <b>Note:</b> Mites will be suppressed if diazinon is used in this regular cover spray program.
	Apple Maggots	1 lb. in 100 gals. of water	Make 3 cover sprays when flies are active and laying eggs. Allow at least 14 days between applications. <b>Note:</b> Diazinon will not control organophosphate-resistant apple maggot.
	San Jose Scale Crawlers, Forbes Scale Crawlers	1 lb. in 100 gals. of water	Apply early in the season when crawlers first appear. If infestation warrants, make a second application 14 days later.

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Pineapple	Pineapple Mealybugs	2 lbs./A in 200-500 gals. of water	Repeat application, as necessary, every 28 days, up to a maximum of 8 applications. Do not apply within 7 days of harvest or illegal residues may occur.
Plums/Prunes	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs	1 lb. + 2-3 gals. dormant oil or 1-1 1/2 gals. superior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. If applied in late April or May, mix diazinon with 1 gal. of light medium summer horticultural oil per 100 gals. of water.
	Brown Mites, Clover Mites, European Red Mites	1 lb. in 100 gals. of water	Apply, as needed, every 7 days.
	Leafcurl Plum Aphids, Mealy Plum Aphids, Thistle Aphids	1/2-1 lb. in 100 gals. of water	

**Notes:** (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Strawberries	Aphids, Two-spotted Spider Mites	1 lb. in 100 gals. of water per acre	Apply as pests occur. Repeat application, if necessary, after 7 days.
	Cyclamen Mites	2 lbs. in 100 gals. of water per acre	Direct spray to the plant crowns. Plants should be sufficiently agitated to assure thorough coverage of the foliage. Repeat application after 7 days, if necessary.
	Mole Crickets	2 lbs./A	Apply 1-2 days before transplanting and immediately incorporate into the top 1-2 inches of soil.
	Strawberry Leafrollers	3/4-1 lb. in 100 gals. of water	Apply 200 gals. of spray per acre when blossoms show color.

**Notes:** (1) Do not apply more than 2 lbs. of product per acre per application and no more than 8 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 5 days between the last application and harvest.

Walnuts (CA only)	Aphids, Spider Mites	2 lbs. in 100 gals. of water per acre	Apply as a foliar spray. Repeat application in 14 days, if necessary. Do not make more than 3 applications per season.
	Codling Moths, Scale Crawlers, Walnut Caterpillars	6 lbs. in 100 gals. of water per acre	

**Notes:** (1) Do not apply more than 6 lbs. of product per acre per application and no more than 18 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 45 days between the last application and harvest, and do not apply after husks open.

**VEGETABLE CROPS**

**REI - 24 Hours**

For foliar or soil applications, D-z-n diazinon 50W should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. D-z-n diazinon 50W may be applied aerially or by ground application as specified in the following table. This table indicates the minimum amount of water that can be used for the various methods of application. The specific amount of product to be used appears under the separate directions for use for each crop.

Crop	Ground Application		Aerial Application Minimum Gals./Acre
	Minimum Gals./Acre	OR Minimum Gals./1,000 Sq. Ft.	
Beets, Red (Table)	10	2	5
Broccoli	10	2	5
Brussels Sprouts	10	2	5
Cabbage	10	2	5
Cantaloupes	5	1	5
Carrots	10	2	5
Casaba Melons	5	1	5
Cauliflower	10	2	5

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Crop (continued)	Ground Application		Aerial Application Minimum Gals./Acre
	Minimum Gals./Acre	OR Minimum Gals./1,000 Sq. Ft.	
Chinese Broccoli	10	2	5
Chinese Cabbage	10	2	5
Chinese Mustard	10	2	5
Collards	10	2	5
Crenshaw Melons	5	1	5
Endive (Escarole)	10	2	5
Honeydew Melons	5	1	5
Kale	10	2	5
Lettuce (Head and Leaf)	10	2	5
Muskmelons	5	1	5
Mustard	10	2	5
Onions (Bulb and Green)	10	2	5
Persian Melons	5	1	5
Radishes	10	2	5
Rutabagas	10	2	5
Spinach	10	2	5
Sweet Corn	20	4	5
Tomatoes	10	2	5
Watermelons	5	1	5

Observe stated time intervals between last application and harvest as well as intervals between and maximum numbers of applications per season. Do not apply to food crops grown in greenhouses.

**Pre-Harvest Intervals (PHI\*) for Foliar Applications**

Crop	PHI* (Days)
Beets, Red (Table)	14
Broccoli	7
Brussels Sprouts	7
Cabbage	21
Cantaloupes	3
Carrots	14
Casaba Melons	3
Cauliflower	7
Chinese Broccoli	10
Chinese Cabbage	10
Chinese Mustard	10
Collards	10
Crenshaw Melons	3
Endive (Escarole)	14
Honeydew Melons	3
Kale	10
Lettuce (Head and Leaf)	14
Muskmelons	3
Mustard	10
Onions (Bulb and Green)	14
Persian Melons	3
Radishes	14
Rutabagas	14
Spinach	14
Sweet Corn	7
Tomatoes	1
Watermelons	3

\*PHI = Pre-Harvest Interval or the number of days to wait between the last application and harvest.

**Notes:** (1) **Soil Incorporation:** Following application of this product to control vegetable soil insects, immediately incorporate the product into the soil to the recommended depth (see **Timing/Special Directions**) using a rotary hoe, cultivator, disk, harrow, or other suitable means. For control of surface cutworms, incorporate 2-3 inches, for subterranean cutworms incorporate 3-6 inches. (2) **To Protect Bees:** Foliar applications of this product should not be made to corn during the pollen shed period.

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Crop	Pests	Rate	Timing/Special Directions
Beets, Red (Table)	Cutworms	4-8 lbs./A or 1 1/2-3 oz./1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
	Mole Crickets	2 lbs./A or 3/4 oz./1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 14 days of harvest, or illegal residues may occur. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
Broccoli	Root Maggots	4-6 lbs./A or 1 1/2-2 1/4 oz./1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		4-8 oz. in 50 gals. of water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 1/2-1 cup (4-8 oz.) per plant by hand or by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. <b>Note:</b> Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.
	Cutworms	4-8 lbs./A or 1 1/2-3 oz./1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
	Mole Crickets	2 lbs./A or 3/4 oz./1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 7 days of harvest, or illegal residues may occur. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
	Brussels Sprouts	Root Maggots	4-6 lbs./A or 1 1/2-2 1/4 oz./1,000 sq. ft.
4-8 oz. in 50 gals. of water			In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 1/2-1 cup (4-8 oz.) per plant by hand or by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. <b>Note:</b> Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.
Cutworms		4-8 lbs./A or 1 1/2-3 oz./1,000 sq. ft.	Broadcast just before planting and incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
Mole Crickets		2 lbs./A or 3/4 oz./1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
Wireworms		6-8 lbs./A or 2 1/4-3 oz./1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
Aphids, Diamondback Moths, Imported Cabbageworms		1/2-1 lb./A or 1/5-2/5 oz./1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 7 days of harvest, or illegal residues may occur.

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Crop	Pests	Rate	Timing/Special Directions
Cabbage	Root Maggots	4-6 lbs./A or 1½-2¼ oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		4-8 oz. in 50 gals. of water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply ½-1 cup (4-8 oz.) per plant by hand or by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. <b>Note:</b> Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.
	Cutworms	4-8 lbs./A or 1½-3 oz./ 1,000 sq. ft.	Broadcast just before planting and incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
	Mole Crickets	2 lbs./A or ¾ oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2¼-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	½-1 lb./A or ½-2½ oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 21 days of harvest, or illegal residues may occur. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
Carrots	Cutworms	4-8 lbs./A or 1½-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
	Mole Crickets	2 lbs./A or ¾ oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2¼-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Carrot Rust Fly	4 lbs./A or 1½ oz./ 1,000 sq. ft.	Apply as a drench to the seed furrow at planting.
	Aphids	1 lb./A or 2½ oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 14 days of harvest, or illegal residues may occur.
Cauliflower	Root Maggots	4-6 lbs./A or 1½-2¼ oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		4-8 oz. in 50 gals. of water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply ½-1 cup (4-8 oz.) per plant by hand or by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. <b>Note:</b> Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.
	Cutworms	4-8 lbs./A or 1½-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
	Mole Crickets	2 lbs./A or ¾ oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2¼-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

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Crop	Pests	Rate	Timing/Special Directions
Cauliflower (continued)	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.  Do not apply within 7 days of harvest, or illegal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate- resistant leafminers.
Chinese Broccoli, Chinese Cabbage (Bok Choy and Napa), Chinese Mustard (Gai Choy)	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.  Do not apply within 10 days of harvest, or illegal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate- resistant leafminers.
Collards	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note</b> .)
	Mole Crickets	2 lbs./A or 3/4 oz./1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Harlequin Cabbagebugs, Corn Earworms	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.  Do not apply within 10 days of harvest, or illegal residues may occur.
Endive (Escarole)	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note</b> .)
	Mole Crickets	2 lbs./A or 3/4 oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate 4-8 inches into soil.
	Aphids, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.  Do not apply within 14 days of harvest.  <b>Note:</b> Diazinon will not control organophosphate- resistant leafminers.
Kale	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note</b> .)
	Mole Crickets	2 lbs./A or 3/4 oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Harlequin Cabbagebugs, Corn Earworms	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.  Do not apply within 10 days of harvest, or illegal residues may occur.
Lettuce (Head and Leaf)	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note</b> .)
	Mole Crickets	2 lbs./A or 3/4 oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.

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Crop	Pests	Rate	Timing/Special Directions
Lettuce (Head and Leaf) (continued)	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 14 days of harvest. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
Melons (Cantaloupes, Casabas, Crenshaws, Honeydew, Muskmelons, Persians, and Hybrids of these) and Watermelons	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites	1/2-1 1/2 lbs./A or 1/5-3/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 3 days of harvest, or illegal residues may occur. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
Mustard	Mole Crickets	2 lbs./A or 3/4 oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers, Diamondback Moths, Imported Cabbageworms	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 10 days of harvest. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
Onions (Bulb and Green)	Onion Maggots	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and mix into the top 3-4 inches of soil. (See <b>Soil Incorporation Note.</b> ) <b>Note:</b> Diazinon will not control organophosphate-resistant onion maggots.
	Onion Thrips	1 lb./A or 2/5 oz./ 1,000 sq. ft.	Apply as thrips appear. Repeat after 7 days, if necessary. Do not make more than 3 applications per season. Do not apply within 14 days of harvest or illegal residues may occur.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
Radishes	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note.</b> )
	Mole Crickets	2 lbs./A or 3/4 oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Flea Beetles, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 3 times, with a minimum of 7 days between applications. Do not apply within 14 days of harvest, or illegal residues may occur. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.

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Crop	Pests	Rate	Timing/Special Directions
Rutabagas	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note</b> .)
	Mole Crickets	2 lbs./A or 3/4 oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Flea Beetles, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.  Do not apply within 14 days of harvest, or illegal residues may occur. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
Spinach	Aphids, Dipterous Leafminers	1/2-1 lb./A or 1/5-2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.  Do not apply within 14 days of harvest. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
Sweet Corn	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note</b> .)
	Seed Corn Maggots	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Corn Earworms	2-2 1/2 lbs./A or 3/4-1 oz./ 1,000 sq. ft.	Apply when silks first appear. Repeat application every 7 days, up to a maximum of 5 applications, if necessary.
	Corn Leaf Aphids	1-2 lbs./A or 2/5-3/4 oz./ 1,000 sq. ft.	Apply in sufficient water to provide complete coverage to the upper portions of the plants. Repeat in 7 days, if necessary. Do not make more than 5 applications per season.
	Grasshoppers, Spider Mites, Flea Beetles	1 lb./A or 2/5 oz./ 1,000 sq. ft.	Apply as insects occur. Repeat if necessary, but do not make more than 5 applications per season.
	Sap Beetles	2-2 1/2 lbs./A or 3/4-1 oz./ 1,000 sq. ft.	Consult local agricultural authorities for proper timing of application. Repeat application in 7 days, if necessary. Do not make more than 5 applications per season.
<b>Notes:</b> (1) To protect bees, do not apply foliarly to corn during the pollen shed period. (2) Allow a minimum of 7 days between the last application and grazing or cutting for forage. (3) Corn may be picked 7 days after the last application.			
Tomatoes	Cutworms	4-8 lbs./A or 1 1/2-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the soil. (See <b>Soil Incorporation Note</b> .)
	Mole Crickets	2 lbs./A or 3/4 oz./ 1,000 sq. ft.	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	6-8 lbs./A or 2 1/4-3 oz./ 1,000 sq. ft.	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

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Crop	Pests	Rate	Timing/Special Directions
Tomatoes (continued)	Aphids, Dipterous Leafminers	1/2 lb./A or 1/5 oz./ 1,000 sq. ft.	Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within one day of harvest, or illegal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
	Banded Cucumber Beetles, Fall Armyworms, Southern Armyworms, Beet Armyworms	3/4-1 lb./A or 3/10-2/5 oz./ 1,000 sq. ft.	
	Vinegar Flies ( <i>Drosophila</i> spp.)	1/2-1 1/2 lbs./A or 1/5-3/5 oz./ 1,000 sq. ft.	

**MUSHROOM HOUSES**

**Mushroom Flies (Phorids and Sciarids)**

Mix 4-5 lbs. of D-z-n diazinon 50W in 50 gals. of water and spray on outside and inside walls, floors, and sideboards of mushroom houses after compost has been pasteurized by heating. Also spray over the plastic covering the beds and trays after spawning. **Note:** Do not spray the compost. To avoid illegal residues, do not apply more than 3 applications to mushroom houses per crop.

**SEED TREATMENT - PLANTER BOX TREATMENT**

In the planter box, mix with seed as a dry mixture. Stir slightly, using a mixing stick. **DO NOT MIX WITH BARE HANDS.** Treat only those seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seed beyond planting time. Exposed treated seeds may be hazardous to birds and other wildlife. Dispose of excess treated seed by burial away from bodies of water.

**Notes:** (1) If seed has not been treated with a fungicide, use an EPA-registered fungicide in combination with D-z-n diazinon 50W at rates indicated on the fungicide package. Failure to use a fungicide may result in injury to the seed. (2) If the seed treatment increases the friction between seeds sufficiently to reduce the rate of delivery through the planter, 1/2 oz. of graphite per bushel seed should be added as a drill lubricant. Adjust the planter to give the required rate of seed delivery with the treated seed. (3) Treated seed must not be used for or mixed with food or animal feed or processed for oil.

**Corn**

Seedcorn Beetle: Mix 3 oz. per bushel of seed.

**Corn, Succulent Peas, and Succulent Beans**

Seedcorn Maggot: Mix 1/2 oz. per bushel of seed.

**FIELD CROPS**

**REI - 24 Hours**

Soil and foliar applications of D-z-n diazinon 50W should always be applied as a spray in sufficient water to ensure thorough coverage. For foliar applications, observe stated time intervals between last application and harvest, as well as intervals between applications and total number of applications that can be made per season:

**Pre-Harvest Intervals (PHI\*) For Foliar Applications**

Crop	PHI*
Hops	14
Sugar Beets	14

\*PHI = Pre-Harvest Interval or the number of days to wait between the last application and harvest.

Crop	Pests	Rate	Timing/Special Directions
Hops	Aphids, Spider Mites	2 lbs./A	Apply as pests occur. Repeat application, if necessary, after 14 days. Do not make more than 4 applications per season or apply within 14 days of harvest, or illegal residues may occur.
Sugar Beets	Wireworms	6-8 lbs./A	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil. Do not apply more than 8 lbs. of this product to the soil per season.
	Beet Leafhoppers, Dipterous Leafminers, Aphids	3/4-1 lb./A	Apply as insects occur. Repeat application, as necessary, up to 5 times per season, with a minimum of 7 days between applications. Do not apply within 14 days of harvest. <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
	Grasshoppers	1 lb./A	Apply as insects occur. Repeat application, as necessary, up to 5 times per season, with a minimum of 7 days between applications. Do not apply within 14 days of harvest.

**Note:** Sugar beet tops may be fed to beef and dairy animals.



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## INSECT CONTROL ON ORNAMENTALS GROWN IN NURSERIES

### REI - 12 hours

To control certain insects on ornamentals, such as Arborvitae, Azalea, Birch, Boxwood, Camellia, Carnation, Chrysanthemum, Crab Apple, Dogwood, Douglas Fir, Elm, Euonymus, Gladioli, Hawthorn, Holly, Honey Locust, Honeysuckle, Juniper, Lilac, Lily, Locust, Maple, Marigold, Oak, Pansy, Petunia, Pine, Ornamental Plum, Poplar, Rhododendron, Rose, Scotch Pine, Spirea, Spruce, Sycamore, Wax Plant (Hoya), Willow, Yellowwood, and Yew, apply the recommended rates indicated below. Apply when pests first appear. Try to spray underside of leaves and penetrate dense foliage. Repeat as necessary.

**Note: Do not use on Ferns, Poinsettia, Hibiscus, Papaya, Pilea, and Gardenia, since injury to the plants may occur.**

Insects	Amount of D-z-n diazinon 50W to Use	
	Rate per 3 gals. water	Rate per 100 gals. water
Aphids, Bagworms, Carnation Bud Mites, Carnation Shoot Mites, Clover Mites, Cyclamen Mites, Dipterous Leafminers, European Pine Shoot Moths, European Red Mites, Flea Beetles, Holly Bud Moths, Leafhoppers, Obscure Root Weevils, Omnivorous Leafhoppers, Privet Mites, Scale Crawlers (Cottony-cushion, Lecanium, Pine Needle, San José, Soft), Thrips, Two-spotted Spider Mites, Juniper Webworms, Whiteflies	1/2 oz.	1 lb.
Apple-and-Thorn Skeletonizers, Cotoneaster Webworms, European Pine Sawfly, Fall Webworms, Hemlock Chermes, Oak Loopers, Obliquebanded Leafrollers, Pear Slugs, Tent Caterpillars	1 1/2 oz.	3 lbs.

**Mimosa Webworms:** Mix 1/2 oz. in 3 gals. of water (or 1 lb. in 100 gals. of water) and apply as a thorough foliar spray when adults first appear. Make a second and third application at 4 to 5-week intervals.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

### Pesticide

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. To avoid harming aquatic organisms in rivers and other surface waters, do not pour spray mixture or rinse water into sanitary drains (for example, toilets, floor drains, and sinks) or into storm water sewers (for example, street drains). If pesticide, spray mixture, or rinsates 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

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. Stay out of smoke from burning container.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing. Avoid contamination of food and feed. Food utensils, such as teaspoons or measuring cups, must not be used for food purposes after use in measuring pesticides. Keep out of reach of domestic animals. Do not use on humans or pets. Do not contaminate ornamental fish ponds. Be sure to read and follow **Work Safety Rules** and Worker Protection precautions appearing in this booklet.

**Have the product container or label with you when calling a poison control center or doctor, or going for treatment.**

FIRST AID	
This product contains diazinon, an organophosphate insecticide that inhibits cholinesterase.	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
In the event of a major fire, spill, or other emergency, call 1-800-888-8372, day or night.	
<b>NOTE TO PHYSICIAN</b>	
This product contains diazinon, an organophosphate that inhibits cholinesterase. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal, but should be administered only in conjunction with atropine.	

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## Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves

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.

### Engineering Control Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### Environmental Hazards

This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Do not exceed maximum permitted label rates. Rates above those recommended significantly increase potential hazards to birds and waterfowl. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab, and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment wash water.

This pesticide is highly toxic to bees exposed to direct treatment or to residues on blooming crops or weeds. Do not apply this pesticide or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

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