



2/14/2001

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

FEB 14 2001

Ms. Carolyn Brinkley  
Syngenta Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419-8300

Dear Ms. Brinkley:

Subject: Amendment - delete Beans, Cucumbers, Parsley, Parsnips, Peas, Peppers, Potatoes, Spinach, Squash (summer and winter), Sweet potatoes, Swiss Chard, Strawberries, Tomatoes, Turnips, Lawns or any other turf sites (including fire ant mound treatment), Barrier strips, ditch banks, Nuisance pests in outside areas (includes foundation band treatment, treatment of exterior of buildings and surrounding areas), non crop areas, roadsides, and wasteland; and add/modify text as required by December 5, 2000 MOA; update First Aid section per PR Notice 2001-1  
D.z.n diazinon AG500  
EPA Registration Number 100-461  
Your submission dated January 12, 2001

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(a), is acceptable provided that you:

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a. Since there are no longer lawn uses on the label, you may delete the front panel prohibition "This product must not be used on golf courses or sod farms". While your cover letter mentions this as item "5" and your working copy reflected this deletion, your amended labeling still included the statement.
  - b. Re-add the prohibitions "Do not use in barns or dwellings. Do not use on livestock." in the General Information section.

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3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely,

George T. LaRocca  
Product Manager 13  
Insecticide Branch  
Registration Division (7505C)

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

(Booklet for 2 1/2 Gallon Container)

**D•z•n® diazinon AG500  
INSECTICIDE**

For control of certain <sup>outdoors</sup> insects on fruits, nuts, vegetables, field crops, and ornamentals grown in nurseries.

**This product must not be used on golf courses and sod farms.**

Active Ingredient:	
Diazinon: O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate . . . . .	48.0%
<u>Inert Ingredients*:</u>	<u>52.0%</u>
Total:	100.0%

\*Contains xylene range aromatic solvent

D•z•n diazinon AG500 contains 4 lbs. diazinon per gallon

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use inside booklet.

2 1/2 Gallons  
U.S. Standard Measure  
  
EPA Reg. No. 100-461  
  
EPA Est. 70404-AL-001  
  
SCP 461A-L1K 0101

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
FEB 14 2001**  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
100-461

[QUARK/DZN DIAZINON AG500/N-DZNAG500BKLT-B] - CCG - 1/11/01

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## 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.

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## **DIRECTIONS FOR USE**

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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 into 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
- Chemical-resistant gloves such as barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, and Viton  $\geq$  14 mils
- 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.**

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### **General Information**

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D•z•n diazinon AG500 is an emulsifiable solution which, when diluted with water according to the directions, is intended for the control of insect pests of agricultural crops and other plants. Do not use in greenhouses.

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.

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### **Work Safety Rules**

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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 AG500, 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 2 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.

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### **Spray Equipment**

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Applications of D•z•n diazinon AG500 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 applica-

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tion. 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.

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### **Mixing Procedures**

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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.

#### **1. D•z•n diazinon AG500 Alone:**

Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the D•z•n diazinon AG500 to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the D•z•n diazinon AG500 has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

#### **2. D•z•n diazinon AG500 In Tank-Mixtures:**

**Note: Do not mix D•z•n diazinon AG500 with any formulation of Captan® or Captec® because crop injury may occur.**

D•z•n diazinon AG500 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.

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 AG500 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.

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### **Aerial Application**

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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.

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### **Chemigation (Application Through an Irrigation System)**

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D•z•n diazinon AG500 may be applied alone or in combination with other pesticides registered for application through sprinkler including center pivot, lateral move, end tour 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 non-uniform 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 con-



tain 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 AG500 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.

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3. Add the pre-measured D•z•n diazinon AG500 to the chemigation system supply tank and dilute with water if needed. Proper agitation is needed if D•z•n diazinon AG500 is tank mixed with other pesticides registered for sprinkler or drip chemigation application to cranberries.
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 diazinon 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 AG500 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 AG500 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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### **Fruit and Nut Crops**

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REI - 24 hours

D•z•n diazinon AG500 may be applied using ground or aerial application equipment 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 rate of D•z•n diazinon AG500 for aerial spray or concentrated spray applied to fruit trees by ground equipment is based on a dilute full cover spray applied 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. If the **Rate** calls for 1 pt. of D•z•n diazinon AG500 in 100 gals. of water, this amounts to 3-4 pts. of product per acre when applied at the 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 **Timing/Special Directions** for individual crops.

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Crop	Aerial Application Minimum Gals./Acre	Ground Application Minimum Gals./Acre	
		Dilute	Concentrate
Almonds*	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
Plums	20	100	20
Prunes	20	100	20
Raspberries**	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 amount of product that can be applied per season.

Crop	PHI*
Almonds	**
Apricots	21
Blackberries	7
Blueberries	7
Boysenberries	7
Cherries	21
Cranberries	7
Dewberries	7
Grapes	28
Loganberries	7
Nectarines	21
Peaches	21
Plums, Prunes	21
Raspberries	7
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 to fruit trees when trees or substantial numbers of weeds in the orchard are in bloom.

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Crop	Pest	Rate	Timing/Special Directions
Almonds (CA only)	San Jose Scale, Parlatoria Scale	1-1½ pts. + 2-3 gals. dor- mant oil or 1-1½ gals. supe- rior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 6 pts. of diazinon or 9 gals. of oil per acre.
Apricots	Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers	1 pt. in 100 gals. of water	Apply as infestations occur. Repeat applica- tion after 14 days, if necessary.

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Crop	Pest	Rate	Timing/Special Directions
Apricots (Contd)	Olive Scale Crawlers	1/2 pt. + 1 1/2 gals. of light medium hor- ticultural oil per 100 gals. of water	Apply when scale crawlers are present.
	Apricot Mealybugs	1 pt. per 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 pts. of product per acre per application and no more than 12 pts. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

Blue-berries	Cranberry fruitworms, Cherry fruitworms, Blueberry maggots, Aphids, Thrips, Two-spotted spider mites	1 pt. per 100 gals. of water	Apply as infestations occur. Allow 14 days between applications.
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Crop	Pest	Rate	Timing/Special Directions
Blue-berries (Cont'd)	Fire ants	1 pt. per 100 gals. of water	To aid in the control of fire ants in blueberry fields, slowly apply 1 gal. of diluted mixture over and 6 inches around each 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, 65-80°F, or in early morning or late evening hours.

**Notes:** (1) Do not apply more than 2 pts. 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	Pest	Rate	Timing/Special Directions
Cane-berries CA, OR, and WA only (Black-berries, Boysen-berries, Dew-berries, Logan-berries, Rasp-berries)	Leaf-hoppers, Thrips, Aphids, Two-spotted Spider Mites, Raspberry Fruit-worms, Raspberry Sawflies	1 qt./A	Apply as insects occur. Repeat application after 14 days, if necessary.  Apply in a minimum of 100 gals. of water per acre (200 gals. per acre maximum).  For Raspberry Fruitworms make one application when blossom buds separate. Make a second application immediately before blos- soms open.
	Dryberry Mites	1-2 qts./A	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.  Apply in a minimum of 100 gals. of water per acre.
	Raspberry Crown Borers (Raspberry Root Borers)	2 qts./A	Apply a single applica- tion in a minimum of 100 gals. of water per acre as a drench to the crown and lower canes in the Spring before buds break.

**Notes:** (1) Do not apply more than 2 qts. of product per acre per applica-  
tion and no more than 5 qts. 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	Pest	Rate	Timing/Special Directions
Cherries	Eyespotted Bud Moths, Fruit Tree Leaf-rollers	1 pt. in 100 gals. of water	Apply in cover sprays as infestations occur beginning at petal fall. Repeat application after 7 days, if necessary.
	Leafhoppers	1 pt. in 100 gals. of water	Make 3 applications beginning at petal fall and continuing through the growing season as infestations occur. Allow 7 days between applications.
	Cherry Fruitflies	1/2 -1 pt. 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 pt. in 100 gals. of water	Apply as a cover spray when aphids appear. Repeat application after 10 days, if necessary.

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Crop	Pest	Rate	Timing/Special Directions
Cherries (Contd)	San Jose Scale Crawlers	1 pt. in 100 gals. of water	Apply during the pre-pink stage or when crawlers first appear.
	Cherry Rust Mites	1/2-1 pt. in 100 gals. of water	Apply to trees as a single supplemental spray after harvest.

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

Cran- berries	Blackheaded Fireworms ( <i>Rhopobota naevana</i> )	2 qts./A	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	2 qts./A	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 maximum of 6 applications per season is permitted.

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Crop	Pest	Rate	Timing/Special Directions
Cranberries (Cont'd)	Cranberry Fruitworms	2 to 3 qts./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 maximum of 4 applications per season is permitted for the 3 qt. rate. A maximum of 6 applications per season is permitted for the 2 qt. 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/A, for aerial application a minimum of 20 gals. of water/A, for chemigation up to 400 gals. of water/A. 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 on EPA-approved diazinon labels. (3) Do not apply more than 12 qts. 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 Leaf-folders, Omnivorous Leaf-rollers, Aphids, Spider Mites	1-2 pts./A in a minimum of 100 gals. of water	Apply as pest occurs as a thorough cover spray. Repeat application after 7 days, if necessary.
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Crop	Pest	Rate	Timing/Special Directions
Grapes (Cont'd)	<i>Drosophila</i> spp.	6 fl. oz./A in a mini- mum of 100 gals. of water (300 gals. of water maxi- mum)	Apply as pest occurs as a thorough cover spray. Repeat application after 7 days, if necessary.

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

Nectar- rines	Oriental Fruit Moths	1 pt. in 100 gals. of water	Apply at 100% petal fall. Make 2 additional appli- cations at 10 to 15-day intervals. Time the last application to peak adult flight.
	Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers, Peach Twig Borers	1 pt. in 100 gals. of water	Apply as infestations occur. Repeat applica- tion after 14 days, if necessary.

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

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Crop	Pest	Rate	Timing/Special Directions
Peaches	Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers	1 pt. in 100 gals. of water	Apply as infestations occur. Repeat applica- tion after 14 days, if necessary.
	Oriental Fruit Moths	1 pt. in 100 gals. of water	Apply at 100% petal fall. Make 2 additional appli- cations at 10 to 15-day intervals. Time the last application to peak adult flight.
	Peach Twig Borers	1 pt. in 100 gals. of water	Apply as insects occur in May and June. Allow 7 days between applica- tions.
	Leafhoppers	1 pt. 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.

Crop	Pest	Rate	Timing/Special Directions
Peaches (Cont'd)	White Peach Scale	1 1/2- 2 pts. in 100 gals. of water	Apply post-harvest timed to coincide with peak crawler and immature scale activity. Under conditions of heavy infestation 2 applica- tions (7 days apart) may be needed. Do not apply before fruit is harvested.

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

Plums	Brown Mites (Clover Mites), European Red Mites	1 pt. in 100 gals. of water	Apply, as needed, every 7 days.
	Leafcurl Plum Aphids, Mealy Plum Aphids, Thistle Aphids	1/2-1 pt. in 100 gals. of water	

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

Crop	Pest	Rate	Timing/Special Directions
Prunes	Brown Mites (Clover Mites), European Red Mites	1 pt. in 100 gals. of water	Apply, as needed, every 7 days.
	Leafcurl Plum Aphids, Mealy Plum Aphids, Thistle Aphids	1/2-1 pt. in 100 gals. of water	

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

Crop	Pest	Rate	Timing/Special Directions
Walnuts (CA only)	Aphids, Spider Mites	1 qt./A	Apply as a foliar spray. Repeat application after 14 days, if necessary. Make ground applications in a minimum of 100 gals. of water per acre.
	Codling Moths, Scale Crawlers, Walnut Cater- pillars	3 qts./A	

**Notes:** (1) Do not apply more than 4 qts. of product per acre per application. (2) Do not apply more than 9 qts. of product per acre per season. (3) To avoid illegal residues, allow a minimum of 45 days between the last application and harvest, and do not apply after husks open.

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**Vegetable Crops**

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REI - 24 hours

For foliar or soil applications, D•z•n diazinon AG500 should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. D•z•n diazinon AG500 may be applied using ground or aerial application equipment 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.



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Crop	Ground Application		Aerial Application
	Minimum Gals. /Acre	OR Minimum Gals./1,000 Sq. Ft.	Minimum Gals. /Acre
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
Chinese Broccoli	10	2	5
Chinese Cabbage	10	2	5
Chinese Mustard	10	2	5
Chinese Radish (CA, FL only)	10	2	5
Collards	10	2	5
Crenshaw Melons	5	1	5
Endive (Escarole)	10	2	5
Ginseng	10	2	-
Honeydew Melons	5	1	5
Kale	10	2	5
Lettuce, Head	10	2	5
Lettuce, 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
Sweet Corn	20	4	5
Watermelons	5	1	5

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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**

<b>Crop</b>	<b>PHI* (Days)</b>
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
Chinese Radish	10
Collards	10
Crenshaw Melons	3
Endive (Escarole)	14
Ginseng	30
Honeydew Melons	3
Kale	10
Lettuce	14
Muskmelons	3
Mustard	10
Onions (Bulb and Green)	14
Persian Melons	3
Radishes	14
Rutabagas	14
Sweet Corn	7
Watermelons	3

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

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**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	Pest	Rate	Timing/Special Directions
Beets, Red (Table)	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

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Crop	Pest	Rate	Timing/Special Directions
Beets, Red (Table) (Contd)	Dipterous Leafminers	1/2-1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.</p> <p>Do not apply within 14 days of harvest, or illegal residues may occur.</p> <p><b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.</p>
Broccoli	Root Maggots	2-3 qts./A	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		4-8 oz. per 50 gals. of water	<p>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.</p> <p><b>Note:</b> Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.</p>
	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)

Crop	Pest	Rate	Timing/Special Directions
Broccoli (Contd)	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbage worms, Dipterous Leafminers	1/2 -1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  Do not apply within 7 days of harvest, or ille- gal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate- resistant leafminers.
Brussels Sprouts	Root Maggots	2-3 qts./A	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.

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Crop	Pest	Rate	Timing/Special Directions
Brussels Sprouts (Contd)	Root Maggots	4-8 oz. in 50 gals. of water	<p>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.</p> <p><b>Note:</b> Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.</p>
	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbage-worms	1/2-1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.</p> <p>Do not apply within 7 days of harvest, or illegal residues may occur.</p>

Crop	Pest	Rate	Timing/Special Directions
Cabbage	Root Maggots	2-3 qts./A  4-8 oz. in 50 gals. of water	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.  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	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.



Crop	Pest	Rate	Timing/Special Directions
Cabbage (Contd)	Aphids, Diamondback Moths, Imported Cabbage- worms, Dipterous Leafminers	1/2-1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.</p> <p>Do not apply within 21 days of harvest, or illegal residues may occur.</p> <p><b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.</p>
Carrots	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids	1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.</p> <p>Do not apply within 14 days of harvest, or illegal residues may occur.</p>

Crop	Pest	Rate	Timing/Special Directions
Cauliflower	Root Maggots	2-3 qts./A  4-8 oz. in 50 gals. of water	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.  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	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

Crop	Pest	Rate	Timing/Special Directions
Cauliflower (Contd)	Aphids, Diamondback Moths, Imported Cabbage- worms, Dipterous Leafminers	1/2-1 pt./A	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 ille- gal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate- resistant leafminers.
Chinese Broccoli	Aphids, Diamondback Moths, Imported Cabbage- worms, Dipterous Leafminers	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  Do not apply within 10 days of harvest, or ille- gal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate- resistant leafminers.
Chinese Cabbage (Bok Choy and Napa)	Aphids, Diamondback Moths, Imported Cabbage- worms, Dipterous Leafminers	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  Do not apply within 10 days of harvest, or ille- gal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate- resistant leafminers.

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Crop	Pest	Rate	Timing/Special Directions
Chinese Mustard (Gai Choy)	Aphids, Diamondback Moths, Imported Cabbage-worms, Dipterous Leafminers	1/2-1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.</p> <p>Do not apply within 10 days of harvest, or illegal residues may occur.</p> <p><b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.</p>
Chinese Radish (Japanese Radish or Daikon) (FL and CA only)	Aphids, Diamondback Moths, Imported Cabbage-worms, Dipterous Leafminers	1 pt./A	<p>Mix in a minimum of 100 gals. of water per acre and apply as a foliar spray as pests occur. Repeat application, as necessary, every 14 days. Do not make more than 3 applications per season.</p> <p>Do not apply within 10 days of harvest, or illegal residues may occur.</p> <p><b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.</p>
Collards	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.

Crop	Pest	Rate	Timing/Special Directions
Collards (Contd)	Wireworms	3-4 qts/A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbage- worms, Harlequin Bugs, Corn Earworms	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 10 days of harvest, or illegal residues may occur.

Crop	Pest	Rate	Timing/Special Directions
Endive (Escarole)	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  Do not apply within 14 days of harvest.  <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.

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Crop	Pest	Rate	Timing/Special Directions
Ginseng	Leafhoppers, Aphids, Lygus Bugs, Flea Beetles, Jumping Plant Lice	3/4-1 pt./A	Spray when insects first appear. For heavy insect infestations, use 1 pt./A. Apply by ground equipment using 10-100 gals. of water per acre. <b>Do not apply more than one application per growing season.</b> Do not apply during flowering of 3 or 4 year old crops. Do not apply within 30 days of harvest. Do not graze treated areas or feed treated forage to livestock.
Kale	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

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Crop	Pest	Rate	Timing/Special Directions
Kale (Contd)	Aphids Diamondback Moths, Imported Cabbage- worms, Harlequin Bugs, Corn Earworms	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  Do not apply within 10 days of harvest, or ille- gal residues may occur.
Lettuce	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorpo- ration Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  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	Pest	Rate	Timing/Special Directions
Melons (Cantaloupes, Casabas, Crenshaws, Honeydews, Muskmelons, Persians, and Hybrids of these), and Watermelons	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts./A	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 pts./A	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.

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Crop	Pest	Rate	Timing/Special Directions
Mustard	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers, Diamondback Moths, Imported Cabbage- worms	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  Do not apply within 10 days of harvest, or illegal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.

Crop	Pest	Rate	Timing/Special Directions
Onions (Bulb and Green)	Onion Maggots	2-4 qts./A	Broadcast just before planting and mix into the top 3-4 inches of soil.  <b>Note:</b> Diazinon will not control organophosphate- resistant onion maggots.
	Onion Thrips	1 pt./A	Apply as thrips appear. Repeat application, as necessary, every 7 days. Do not make more than 3 applications per season.  Do not apply within 14 days of harvest, or illegal residues may occur.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

Crop	Pest	Rate	Timing/Special Directions
Radishes	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Flea Beetles, Dipterous Leafminers	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 3 applications per season.  Do not apply within 14 days of harvest, or illegal residues may occur.  <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.

Crop	Pest	Rate	Timing/Special Directions
Ruta- bagas	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qts./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Flea Beetles, Dipterous Leafminers	1/2-1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  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	Pest	Rate	Timing/Special Directions
Sweet Corn	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Seed Corn Maggots	2-4 qts./A	Broadcast just before planting and immediately incorporate into the top 2 inches of soil.
	Wireworms	3-4 qts./A	Broadcast before planting and immediately incorporate into the top 4-8 inches of soil.
	Corn Earworms	1-1 <sup>1</sup> / <sub>4</sub> qts./A	Apply when silks first appear. Repeat application every 7 days, if necessary. Do not make more than 5 applications per season.

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Crop	Pest	Rate	Timing/Special Directions
Sweet Corn (Contd)	Corn Rootworm (Adults)	1/2-1 pt. /A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.
	Corn Leaf Aphids	1-2 pts./A	Apply in sufficient water to provide complete cov- erage to the upper por- tions of the plants. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.
	Grass- hoppers, Spider Mites, Flea Beetles	1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.
	Sap Beetles	2-2 1/2 pts./A	Consult local agricul- tural authorities for proper timing of sprays. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.

**Notes:** (1) To protect bees, do not apply foliarly to corn during the pollen shed period. (2) Allow 7 days after the last application before grazing or cutting for forage. Forage may be fed to beef and dairy cattle and sheep. (3) Corn may be picked 7 days after the last application.

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**Field Crops**

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REI - 24 hours

Soil and foliar applications of D•z•n diazinon AG500 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 Interval (PHI\*) for Foliar Applications**

Crop	PHI* (Days)
Hops	14
Sugar Beets	14

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



Crop	Pest	Rate	Timing/Special Directions
Hops	Aphids, Spider Mites	1 qt. /A	Apply as pests occur. Repeat application, as necessary, every 14 days. Do not make more than 4 applications per season.  Do not apply within 14 days of harvest.
Sugar Beets	Wireworms	3-4 qts./A	Broadcast just before planting. Incorporate into soil 4-6 inches.  Do not apply more than 4 qts. of this product to the soil, per season.
	Beet Leaf-hoppers, Dipterous Leafminers, Aphids	<sup>3</sup> / <sub>4</sub> -1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  Do not apply within 14 days of harvest.  <b>Note:</b> Diazinon will not control organophosphate-resistant leafminers.
	Grasshoppers	1 pt./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.  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 Outdoors in Nurseries**

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REI - 12 hours

To control certain insects on Arborvitae, Azalea, Birch, Boxwood, Camellia, Carnation, Chrysanthemum, Crab Apple, Dogwood, Douglas Fir, Elm, Euonymus, Gladioli, Hawthorn, Holly, Honey Locust, Honeysuckle, Juniper, Lilac, Lilly, 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. Spray when listed pests first appear. Try to spray underside of leaves and penetrate dense foliage. Repeat as necessary.

*Precaution: 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 AG500 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 Leaf tiers, Privet Mites, Scale Crawlers (Cottonycushion, Lecanium, Pine Needle, San Jose, Soft), Thrips, Two-spotted Spider Mites, Juniper Webworms, Whiteflies	1/2 fl. oz.*	1 pt.**
Apple-and-Thorn Skeletonizers, Cotoneaster Webworms, European Pine Sawfly, Fall Webworms, Hemlock Chermes, Oak Loopers, Obliquebanded Leafrollers, Pear Slugs, Tent Caterpillars	1 1/2 fl. oz.*	3 pts.**

\* 1 fl. oz. = 2 tablespoons

\*\*16 fl. oz. = 1 pint

Mimosa Webworms: Mix 1/2 fl. oz. in 3 gals. of water (or 1 pt. in 100 gals. of water) and apply as a thorough foliar spray when adults first appear. Make a second and third application at 4-5 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 the concentrate, 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 rinsate 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**

Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or incinerate, or burn, if allowed by state and local authorities. 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.

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## **PRECAUTIONARY STATEMENTS**

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### **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.**

<b>FIRST AID</b>	
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 a 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 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.	

### **Personal Protective Equipment**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category F on an EPA chemical resistance category selection chart. 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.

#### **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical resistant gloves such as barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, or Viton  $\geq 14$  mils.
- Shoes plus socks

#### **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, especially 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 waters.

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.

### **Physical or Chemical Hazards**

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

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Syngenta Crop Protection, Inc.  
Greensboro, North Carolina 27409

Revised March 24, 1981  
Revised February 23, 1983  
March 11, 1985 - incorporated EPA PR Notices 83-2 & 83-3, added new 2½ gal. size, lower case "d" on diazinon.)  
April 29, 1985 - Generic revisions, lower turf rates, fire ants and avian toxicity precautions, AI change.)  
August 8, 1985 - deleted forest use per Ground Water Data Call-In Option.  
October 25, 1985 - deleted fire ants.  
Accepted 12/10/85  
April 1986 - reduced turf rates, added precautions re: avian tox.  
April 5, 1988 - added chemigation prohibition, deleted golf course/sod farm dfu and precautions under Env. Hazards. Added do not use on golf courses and sod farms to front panel.  
June 7, 1989 - deleted crops not supported under May 1, 1987, EPA Data Call-In; added spill statement; added Chinese broccoli, Chinese cabbage, and Chinese mustard.  
Deleted bermudagrass and rangeland; changed all references from "Corn" to "Sweet Corn;" deleted aerial application instructions for corn. Added "Do not use on commercially grown potatoes which will be hand-harvested." Revised precautionary statements, Note to Physician, Env. Hazards; revised directions for use to be supported by Data Call-In residue chem. program; added some pests; added Chinese radish, ginseng; many other revisions per EPA letter of April 26, 1989 .  
Revised 8/9/89 - Additional minor label revisions per EPA's 6/30/89 letter.  
Revised 9/21/89 - Additional minor, label revisions per EPA's 6/30/89 letter and Reg. Std. changes  
Revised 12/21/89 - added chemigation label lang.  
Revised 1/12/90 - added chemigation referral statement to jug label and to specific cranberry



dfus., revised Env. Hazards per EPA's 12/4/89 letter, made changes per EPA's 11/6/89

D•z•n 50W letter

Accepted 5/10/90 - Reg. Std. changes

Revised 8/21/90 - Corrections to agree with printed label and additional minor changes requested in EPA phone call 8/21/90 - added greenhouse food crop use prohibition.

Revised 10/8/90 - corrected min. gals. for grapes and strawberries, other editor changes per EPA letter of 9 /12/90.

Revised 2/11/91 per EPA letter of 1/3/91

Revised 5/11/92 - deleted celery and revised use patterns for leafy vegs, root and tuber vegs, Brassica leafy vegs, sweet corn, stone fruits, grapes, almonds because of over tolerance residues.

9/10/92 - revised Precautionary Statements per EPA review of 4/27/92 (Caution signal word)

9/18/92 - revised per EPA acceptance letter of 9/15/92 CGA 1L128E

4/1/93 - revised to delete mushroom house use at EPA's request. IR-4 data only supported 50W

6/8/93 - revisions per WPS

1/4/94 - revisions per WPS and EPA's comments in 12/22/93 letter and revision to REI (changed to 24 hrs. for all to 24 hrs. for field crops, vegs and fruits as directed by Reg. Standard and 12 hrs. by default, for ornamentals per WPS document.

4/13/94 - EPA approval of 12-hr. REI for ornamentals. 3/1/94 - CGA IL128G 034

Revised 5/17/95 - added cranberry tipworms, added blueberries, added 15 ornamentals, rutabagas, European pine sawfly to ornamentals.

12/4/95 - Revised cranberry dfu's per Cranberry Institute. Added cranberry, tipworm, blueberries - EPA approved 4/2/96 with comments - H code.

2/5/97 - Added Storage & Disposal section to label per EPA approval letter of 4/2/96, added cranberry irrigation water restrictions per 1996

Diazinon DCI and EPA letter of 11/22/96.  
4/21/97 - Changed Ciba refs. to Novartis,  
changes per EPA letter of 3/6/97, in  
"Nuisance Pest" section, changed perimeter  
treatment dfu's from around "house" to  
"structure." - NCP 1L128J 0697  
1/9/01 - Deleted unsupported crops/sites and  
made Syngenta conversion

[QUARK/DZN DIAZINON AG500/N-DZNAG500BKLT-A] ccg - 1/11/01

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**RESTRICTED USE PESTICIDE  
DUE TO AVIAN AND AQUATIC TOXICITY**

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

(Jug Label for 2 1/2 Gal.)

D•z•n® diazinon AG500

INSECTICIDE

For control of certain insects on fruits, nuts, vegetables, field crops, and ornamentals grown in nurseries.

**This product must not be used on golf courses and sod farms.**

Active Ingredient:

Diazinon: O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate . . . . .48.0%

Inert Ingredients\*: . . . . .52.0%

Total: . . . . .100.0%

\*Contains xylene range aromatic solvent

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2 1/2 Gallons  
U.S. Standard Measure

D•z•n diazinon AG500 contains 4 lbs. diazinon per gallon.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See directions for use in attached booklet.

**AGRICULTURAL USE REQUIREMENTS**

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

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**PRECAUTIONARY STATEMENTS**

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**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.**

<b>FIRST AID</b>	
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 a 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 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.	

### **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, especially waterfowl. Avoid overlapping of sprays. 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 waters.

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.

### **Physical or Chemical Hazards**

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

### **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 the concentrate, 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 rinsate 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.

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**Container**

Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or incinerate, or burn, if allowed by state and local authorities. 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.

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Greensboro, NC 27409

EPA Reg. No. 100-461

EPA Est. 70404-AL-001

SCP 461A-L1K 0101

Revised 4/24/91 - per EPA letter of 4/10/91 minor editorial changes  
Revised 8/17/92 - see booklet  
Revised 9/18/92 - see booklet  
Revised 6/8/93 - see booklet  
Revised 1/4/94 - see booklet  
Revised 4/13/94 - see booklet  
Revised 5/17/95 - changed Division name to Crop Protection; see booklet  
Revised 12/4/95 - see booklet  
Revised 2/5/97 - Added Storage & Disposal section to label per EPA approval letter of 4/2/96, added pesticide disposal statements re: drains, sewers; added cranberry irrigation water restrictions per 1996 Diazinon DCI and EPA letter of 11/22/96, deleted post harvest app. to strawberries - not in rereg. residue program.  
Revised 4/21/97 - changed Ciba refs. to Novartis, minor addition in Env. Hazards per EPA letter of 3/6/97, in Nuisance Pest section, changed house(s) to structure(s).  
Revised 10/6/97 - added tank mix/crop safety precautions, expanded chemigation to all crops.  
Revised 1/9/01 to delete crops and to convert to Syngenta.

[QUARK/DZN DIAZINON AG500/N-DZNAG500BKLT-B] - CCG - 1/11/01