



008660-00124-052599

Printed: 07:43:18 Friday, 18 Jun, 1999 # 106 / 3384

Systems Integration Group, Inc.

**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)

Vertagreen® Diazinon AG500 Insecticide

For control of certain insects on fruits, nuts, vegetables, field crops, lawns, and ornamentals.

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

Active Ingredient:

Diazinon: O,O-Diethyl 0-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate	48.0%
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Inert Ingredients*:	52.0%
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Total:	100.0%
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*Contains xylene range aromatic solvent

Vertagreen® diazinon AG500 Insecticide contains 4 lbs. diazinon per gallon

ACCEPTED

MAY 25 1999

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 8660-124

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. 8660-124

EPA Est. 8660-FL-001



DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

IMPORTANT: Read the entire **Directions for Use** and the **Conditions of Sale and Warranty** before using this product. If terms are not acceptable, return the unopened product container at once.

Conditions of Sale and Warranty

The **Directions for Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Pursell Industries, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Pursell warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Pursell makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Pursell or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Pursell and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Pursell.

DIRECTIONS FOR USE

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

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.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not permit children or pets to go onto treated areas until sprays have dried.

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

Vertagreen® diazinon AG500 Insecticide 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 on food crops grown in greenhouses. Do not use in barns or dwellings. 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 Vertagreen® diazinon AG500 Insecticide do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See **Practical Treatment** 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.

Spray Equipment

Applications of Vertagreen® diazinon AG500 Insecticide 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.

1. Vertagreen® diazinon AG500 Insecticide Alone:

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

2. Vertagreen® diazinon AG500 Insecticide In Tank-Mixtures:

Note: Do not mix Vertagreen® diazinon AG500 Insecticide with any formulation of Captan® or Captec® because crop injury may occur.

Vertagreen® diazinon AG500 Insecticide 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 Vertagreen® diazinon AG500 Insecticide in tank-mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix products' 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)

Vertagreen® diazinon AG500 Insecticide 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 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 Vertagreen® diazinon AG500 Insecticide 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 Vertagreen® diazinon AG500 Insecticide to the chemigation system supply tank and dilute with water if needed. Proper agitation is needed if Vertagreen® diazinon AG500 Insecticide is tank mixed with other pesticides registered for sprinkler or drip chemigation application.
- 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 Vertagreen® diazinon AG500 Insecticide 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 Vertagreen® diazinon AG500 Insecticide 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.

Fruit and Nut Crops

REI - 24 hours

9 of 66

Vertagreen® diazinon AG500 Insecticide 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 Vertagreen® diazinon AG500 Insecticide 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 Vertagreen® diazinon AG500 Insecticide 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.

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
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 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
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 to fruit trees when trees or substantial numbers of weeds in the orchard are in bloom.

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 only as a single 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.

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 qt./A	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. Note: 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 1 qt. of product per acre per season.
(2) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest.

Crop	Pest	Rate	Timing/Special Directions
Cane-berries CA, OR, and WA after 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 blossoms 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. (200 gals./A maximum)
	Raspberry Crown Borers (Raspberry Root Borers)	2 qts./A	Apply a single application 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 application 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.

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.

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.

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, Leaf- hoppers, Grape Berry Moths, Grape Leaf- folders, Omnivorous Leaf- rollers, Aphids, Spider Mites	1-2 pts./A in a mini- mum of 100 gals. of water	Apply as a thorough cover spray as pests occur. 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 a thorough cover spray as pests occur. Repeat application after 7 days, if necessary.

Notes: (1) Do not apply more than 2 pts. of product per acre per applica-
tion 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 applica-
tion 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.

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.

Straw- berries	Aphids, Two-spotted Spider Mites	1 pt. in 100 gals. of water per acre	Apply as pests occur. Repeat application, if necessary, after 7 days.
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Crop	Pest	Rate	Timing/Special Directions
Strawberries (Cont'd)	Cyclamen Mites	1 qt. 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	1 qt./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Strawberry Leaf- rollers	$\frac{3}{4}$ -1 pt. in 100 gals. of water	Apply 200 gals. of spray per acre when blossoms show color.

Notes: (1) Do not apply more than 1 qt. of product per acre per application and no more than 4 qts. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 5 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 3 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.

Vegetable Crops

REI - 24 hours

For foliar or soil applications, Vertagreen® diazinon AG500 Insecticide should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. Vertagreen® diazinon AG500 Insecticide 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.

Crop	Ground Application		Aerial Application
	Minimum Gals. /Acre	OR Minimum Gals./1,000 Sq. Ft.	Minimum Gals. /Acre
Beans (Lima, Pole, and Snap) (succulent only)	10	2	5
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
Casabas	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
Crenshaws	5	1	5
Cucumbers	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
Parsley	10	2	5
Parsnips	10	2	5
Peas (succulent only)	10	2	5
Peppers	10	2	5
Persian Melons	5	1	5
Potatoes (Irish)*	10	2	5
Radishes	10	2	5
Rutabagas	10	2	5
Spinach	10	2	5

(Cont' d)

Cont'd

Crop	Ground Application		Aerial Application
	Minimum Gals. /Acre	OR Minimum Gals./1,000 Sq. Ft.	Minimum Gals. /Acre
Squash, Summer	5	1	5
Squash, Winter	5	1	5
Sweet Corn	20	4	5
Sweet Potatoes	10	2	5
Swiss Chard	10	2	5
Tomatoes	10	2	5
Turnips	10	2	5
Watermelons	5	1	5

*Do not use on commercially grown potatoes which will be hand-harvested.

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)
Beans (Lima, Pole, and Snap)	7
Beets, Red (Table)	14
Broccoli	7
Brussels Sprouts	7
Cabbage	21
Cantaloupes	3
Carrots	14
Casabas	3
Cauliflower	7
Chinese Broccoli	10
Chinese Cabbage	10
Chinese Mustard	10
Chinese Radish	10
Collards	10
Crenshaws	3
Cucumbers	7
Endive (Escarole)	14
Ginseng	30
Honeydew Melons	3
Kale	10
Lettuce	14
Muskmelons	3
Mustard	10
Onions (Bulb and Green)	14
Parsnips	14
Peas	7
Peppers	5
Persian Melons	3
Potatoes (Irish)	35
Radishes	14
Rutabagas	14
Spinach	14
Squash, Summer	7
Squash, Winter	3
Sweet Corn	7
Swiss Chard	14
Tomatoes	1
Turnips, Roots and Tops	14
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 peas or beans if these crops or weeds in the treatment area are in bloom, or to corn during the pollen shed period.

Crop	Pest	Rate	Timing/Special Directions
Beans (Lima, Pole and Snap) (succu- lent only)	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.
	Black Bean Aphids, Mexican Bean Beetles, Dipterous Leafminers	1-1½pts./A	Apply as insects occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season.
	Cucumber Beetles	¾ pt./A	Do not apply within 7 days of harvest, or illegal residues may occur. Bean forage or bean hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if forage is to be cut for hay. Make cucumber beetle application in 100 gals. of water per acre. Notes: 1) Diazinon will not control organophosphate-resistant leafminers. 2) To protect bees, do not apply foliarly if the crop or weeds in the treatment area are in bloom.

Crop	Pest	Rate	Timing/Special Directions
Beans, Lima (succulent only)	Leaf-hoppers, Spider mites	1 pt./A	<p>Apply as pests occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season.</p> <p>Do not apply within 7 days of harvest, or illegal residues may occur.</p> <p>Bean forage or bean hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if forage is to be cut for hay.</p> <p>Note: To protect bees, do not apply foliarly if the crop or weeds in the treatment area are in bloom.</p>
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.

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>Note: 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>Note: 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. Note: 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.

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>Note: 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	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. Note: 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>Note: 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	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		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>Note: 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.

Crop	Pest	Rate	Timing/Special Directions
Cauliflower (Contd)	Aphids, Diamondback Moths, Imported Cabbage- worms, Dipterous Leafminers	1/2-1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.</p> <p>Do not apply within 7 days of harvest, or illegal residues may occur.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
Chinese Broccoli	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>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
Chinese Cabbage (Bok Choy and Napa)	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>Note: Diazinon will not control organophosphate-resistant leafminers.</p>

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>Note: 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>Note: 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.
Cucum- bers	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, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworms	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 illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.

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	<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.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>

Crop	Pest	Rate	Timing/Special Directions
Ginseng	Leafhoppers, Aphids, Lygus Bugs, Flea Beetles, Jumping Plant Lice	¾-1 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. Do not apply more than one application per growing season. 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.

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 In corpo- 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. Note: Diazinon will not control organophosphate- resistant leafminers.

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. Note: Diazinon will not control organophosphate-resistant leafminers.

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	<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>Note: Diazinon will not control organophosphate-resistant leafminers.</p>

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. Note: 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.
Parsley	Cutworms	2-4 qts./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Inco- poration Note.)
	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
Parsnips	Aphids, Flea Beetles, 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>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
Peas (succulent only)	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	3/4-1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season.</p> <p>To avoid illegal residues, allow a minimum of 7 days between the last application and harvest.</p>

Crop	Pest	Rate	Timing/Special Directions
Peas (succulent only) (Contd)	Aphids, Dipterous Leafminers (Cont'd)		<p>Vines and hay may be fed to dairy and beef cattle and sheep. To avoid illegal residues, wait 7 days following treatment if forage is to be cut for hay.</p> <p>Notes: (1) Diazinon will not control organophosphate-resistant leafminers. (2) To protect bees, do not apply foliarly if the crop or weeds in the treatment area are in bloom.</p>
Peppers	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
Peppers (Contd)	Aphids, Serpentine Leafminers	1/2-1 pt./A	<p>Apply as insects appear. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.</p> <p>Do not apply within 5 days of harvest, or illegal residues may occur.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
Potatoes	Cutworms (Surface & Subter- anean)	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.
	Southern Potato Wireworms (South- eastern U.S.)	2-4 qts./A	For potatoes grown on mineral soils in the Southeast, apply before planting and immediately incorporate into the top 3-6 inches of soil depending on location of wireworms.

Crop	Pest	Rate	Timing/Special Directions
Potatoes (Contd)	Aphids, Flea Beetles, Colorado Potato Beetles, Dipterous Leafminers	1/2-3/4 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 35 days of harvest, or ille- gal residues may occur. Note: Diazinon will not control organophosphate- resistant leafminers.
	Banded Cucumber Beetles, Leaf- hoppers, Southern Armyworms	3/4-1 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 35 days of harvest, or ille- gal residues may occur.

Note: Do not use on commercially grown potatoes which will be hand-harvested.

Radishes	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.

Crop	Pest	Rate	Timing/Special Directions
Radishes (Contd)	Aphids, Flea Beetles, Dipterous Leafminers	1/2-1 pt./A	<p>Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 3 applications per season.</p> <p>Do not apply within 14 days of harvest, or illegal residues may occur.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
Ruta- bagas	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
Ruta-bagas (Cont'd)	Aphids, Flea Beetles, 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>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
Spinach	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	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.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>

Crop	Pest	Rate	Timing/Special Directions
Squash, Summer	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, Serpentine 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 7 days of harvest, or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.
Squash, Winter	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.

Crop	Pest	Rate	Timing/Special Directions
Squash, Winter (Contd)	Aphids, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites	1/2-1 1/2 pts./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 3 days of harvest, or illegal residues may occur.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
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 1/4 qts./A	Apply when silks first appear. Repeat application every 7 days, if necessary. Do not make more than 5 applications per season.

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.

Crop	Pest	Rate	Timing/Special Directions
Sweet Potatoes	Wireworms	3-4 qts./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
Swiss Chard	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, Imported Cabbageworms, Diamondback Moths, Harlequin Bugs	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.
Tomatoes	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 4-8 inches of soil.

Crop	Pest	Rate	Timing/Special Directions
Tomatoes (Contd)	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 pt./A	Apply as insects appear. Repeat application, as necessary, every 7 days.
	Banded Cucumber Beetles, Fall Army- worms, Southern Armyworms, Beet Army- worms	3/4-1 pt./A	Do not make more than 5 applications per season. Do not apply within one day of harvest, or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.
	Vinegar Flies (<i>Drosophila</i> spp.)	1/2-1 1/2 pts./A	
Turnips, Roots and Tops	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
Turnips, Roots and Tops (Contd)	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 ille- gal residues may occur. Note: Diazinon will not control organophosphate- resistant leafminers.

Field Crops

REI - 24 hours

Soil and foliar applications of Vertagreen® diazinon AG500 Insecticide 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	<p>Apply as pests occur. Repeat application, as necessary, every 14 days. Do not make more than 4 applications per season.</p> <p>Do not apply within 14 days of harvest.</p>
Sugar Beets	Wireworms	3-4 qts./A	<p>Broadcast just before planting. Incorporate into soil 4-6 inches.</p> <p>Do not apply more than 4 qts. of this product to the soil per season.</p>
	Beet Leaf-hoppers, Dipterous Leafminers, Aphids	3/4-1 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.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
	Grasshoppers	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.</p>

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

Grassland Insects

Ditch Banks, Roadsides, Wasteland, Noncrop Areas, Barrier Strips

Grasshoppers: Spray $\frac{3}{4}$ -1 pt./A in water (minimum of 1 gal. of water/A for aerial applications or a minimum of 5 gals. of water per acre for ground applications) or in oil (a minimum of 1 gal. of oil/A) when insects first appear, preferably in the nymphal stage. Thorough coverage of the foliage is essential.

Do not graze or use treated grass for forage or feed.

Insect Control on Ornamentals

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 (Cottony-cushion, 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.

Lawn Pest Control (Excluding Golf Courses and Sod Farms)

Precautions: Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Apply this product only as specified on this label. Because of the migratory habits of certain waterfowl, do not apply in Nassau County, New York between November 1 and May 20. Do not exceed maximum permitted label rates, since rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Avoid overlapping of sprays. If waterfowl (ducks or geese) can be expected to enter the treated area after treatment (except spot treatments), water lawn with at least 1/4 inch of water immediately after application; however, stop watering before puddling occurs.

To control pests listed below, apply recommended rates. Repeat as necessary.

Pest	Rate/1,000 sq. ft.		Remarks
	D•z•n diazinon AG500	Water	
Lawn Chinch Bugs	2-3 fl. oz.	3 gals.	Use higher rate for longer residual control and in lawns of dense growth, such as St. Augustine lawns.
Ants, Armyworms, Bermudagrass Mites, Clover Mites, Crickets, Cutworms, Digger Wasps, Earwigs, Frit Flies, Lawn Billbugs, Leafhoppers, Sod Webworms (Lawn Moths), Sowbugs (Pillbugs), Springtails (Collembola)	2-3 fl. oz.	3 gals.	Spot spray ant hills and wasp ground nest openings. For digger wasps, apply at dusk when wasps are not active. For frit flies, before treatment mow grass and water well, but delay application until grass is dry. For billbug control apply when activity is first observed or when chewed or brown grass is present, indicating damage from this insect.
Brown Dog Ticks, Chiggers, Fleas	3 fl. oz.	3 gals.	Note: Do not apply to animals. For brown dog ticks, spray grass and under shrubbery, particularly near house.

Pest	Rate/1,000 sq. ft.		Remarks
	D•z•n diazinon AG500	Water	
Hyperodes Weevils	3 fl. oz.	3 gals.	Treat problem areas in mid-April and again in mid-May.
Millipedes	3 fl. oz.	3 gals.	
Rhodesgrass Scales	3 fl. oz.	3 gals.	Apply when crawlers first emerge.
White Grubs (such as Japanese Beetle Larvae, European Chafer, Southern Chafer)	3 fl. oz.	3 gals.	Apply any time between late July and early October.

Nuisance Pests in Outside Areas

Ants, Boxelder Bugs, Brown Dog Ticks, Chiggers, Clover Mites, Cockroaches, Crickets, Earwigs, Fleas, Flies, Millipedes, Sowbugs (Pillbugs), Spiders, Springtails (Collembola).

Mix 3 fl. oz. in 3 gals. of water and thoroughly spray window and door screens, sills, foundations, porch and patio walls, entranceways, walks, garbage cans, tree trunks, and into cracks and other places where insects can hide. To prevent entry of insects into structures, spray a five foot band of soil around the structure next to the foundation and spray the foundation of the structure to a height of 2-3 ft. Repeat application as necessary. **Do not apply to animals. Do not treat plants (other than tree trunks) at this nuisance pest rate.**

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.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye injury. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Avoid contamination of food and feed. Food utensils such as spoons and measuring cups should not be used for food purposes after use in measuring pesticides. Keep out of reach of domestic animals. Do not use on humans, household pets or livestock. Do not contaminate ornamental fish ponds.

Statement of Practical Treatment

This product is an organophosphate.

If swallowed: Call a physician or Poison Control Center immediately. DO NOT INDUCE VOMITING. Vomiting may cause aspiration pneumonia. Do not give anything by mouth if person is unconscious or convulsing.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

If on skin: Wash promptly with soap and water. Rinse thoroughly. Get medical attention.

If in eyes: Rinse eyes with plenty of water. Call a physician if irritation persists.

Note to Physician: If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. This product contains a xylene range aromatic solvent which may present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

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

<p>User Safety Recommendations</p> <p>Users should:</p> <ul style="list-style-type: none"> • 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. Because of the migratory habits of Atlantic Coast waterfowl, do not apply this product to lawns in Nassau County, New York between November 1 and May 20. Do not exceed maximum permitted label rates. Rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Avoid overlapping of sprays. On lawns, if waterfowl (ducks or geese) can be expected in the treated area after treatment (except spot treatment), apply at least 1/4 inch of water immediately after spraying this product; however, stop watering before puddling occurs. 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.

Vertagreen® trademark of Pursell

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