

AUG 22 1995

Mr. A. Eimanis
Makhteshim-Agan of North America Inc.
551 Fifth Avenue, Suite 1100
New York, NY 10176

Dear Mr. Eimanis:

Subject: Amendment- Revise per Diazinon Registration Standard
DIASOL AG500
EPA Registration No. 66222-9
Your submission dated October 14, 1993

This 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. As you note in your cover letter, the correct signal word for this particular product is WARNING, based upon MRIDs 41495703 (acute dermal) and 41495704 (primary eye irritation). The sample labels covered all other AG500 products that use Ciba as a source, follow their formula, and depend on the Ciba's data. The Warning signal word, precautions, and WPS should remain as you submitted August 26, 1993 in response to WPS, unless revisions are indicated below.

b. Under Diasol AG500 add "Organophosphate".

c. Under Diasol AG500 revise "turf" to read "lawns"

d. Revise "Contains xylene range aromatic solvent" to "Contains xylene".

e. Under STATEMENT OF PRACTICAL TREATMENT delete "If inhaled- Remove victim to fresh air and apply artificial respiration if indicated." and replace with " Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention."

f. Under STATEMENT OF PRACTICAL TREATMENT after "If on skin- Remove contaminated clothing and wash affected areas immediately with soap and water." add "Rinse thoroughly. Get medical attention."

g. Revise the Hazards to Humans and Domestic Animals to read as follows: May be fatal if absorbed through skin. Causes substantial but temporary eye injury. Do not get in eyes, or skin, or a clothing. Harmful if swallowed or inhaled. Avoid breathing vapor or spray mist. Do not contaminate food or feed. Keep out of reach of domestic animals. Do not use on humans, household pests or livestock. Do not contaminate ornamental fish ponds."

h. You indicate this product is Toxicity Category III for acute inhalation. Therefore, delete item "7", the respirator requirement, from the list of personal protective equipment as submitted to WPS. However, because of Toxicity Category II for acute dermal add the following to the PPE listing: "Wear chemical-resistant headgear for overhead exposure. When mixing/loading or cleaning equipment add a chemical-resistant apron."

i. Delete the second (NPDES) paragraph from the Environmental Hazards section. This product is not subject to PR Notice 93-10.

j. Under USER SAFETY RECOMMENDATIONS, change "1) wash hands" to read "1) Wash hands".

k. Under AGRICULTURAL USE RECOMMENDATIONS, delete "of 12 hours". The proper REI for each crop group will appear directly under its heading (see below).

l. Under the headings **Fruit and Nut Crops**, **Vegetable Crops**, and **Field Crops** add "REI-24 hours".

m. Under the heading **Insect Control on Ornamentals**, add "REI-12 hours".

n. In the **NOTE:** about the California Department of Agriculture, delete "citrus" and change "organic phosphate" to "organophosphate".

o. Under **STORAGE AND DISPOSAL:** after "Store in dry place." add "Open dumping is prohibited.".

p. After "**Storage**" add the following heading and text:
"Pesticide Disposal: Pesticide wastes are toxic. Improper disposal is a violation of Federal law. 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 of the nearest EPA Regional Office for guidance.".

q. Under **STORAGE AND DISPOSAL CONTAINER DISPOSAL:**, delete "Wastes resulting from...disposal facility.".

r. Also under **STORAGE AND DISPOSAL CONTAINER DISPOSAL:**, add "Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes.".

s. Under **GENERAL INFORMATION** change "Application should be repeated as necessary to maintain control." to read "Application should be repeated only as directed to maintain control.".

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.

Your current Confidential Statement of Formula (CSF) does not list the impurities of toxicological concern separately nor does it include the diazinon certification for FIFRA Sec. 12(a)(1)(C), that the description of this product refers to the composition set forth on the CSF and supporting materials as required by the Diazinon Registration Standard, as well as the certification regarding the determination of the certified limits of the toxicological significant impurities, i.e., reliance on your analysis of your

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technical. Please submit an updated CSF within 60 days.

The Agency has completed its review of the two year storage stability test and has the following comments:

- a. You must explain the occurrence of TEPP, Sulfo-TEPP, and Diazoxon impurities in samples of Diasol AG500 taken at the time of production at levels of 0.02, 0.2, and 0.02%, respectively.
- b. You will need to submit the results of the ongoing 4-year storage stability for diazinon 48% AI in the end-use product Diasol AG500 when stored in commercial containers under ambient warehouse conditions.

Sincerely,

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

Enclosure

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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

DIASOL AG500

For control of certain insects on fruits, vegetables, nuts, field crops, ornamentals and turf.
This product must not be used on golf courses and sod farms

For Agricultural and Commercial Use Only

Active Ingredients:

Diazinon [O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate] 48%

Inert Ingredients* 52%
Total 100%

* Contains xylene range aromatic solvent.

Contains 4 lbs. diazinon per gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

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 and apply artificial respiration if indicated.

If on skin - Remove contaminated clothing and wash affected areas immediately with soap and water.

If in eyes - Flush eyes with plenty of water. Call a physician immediately.

Note to Physician This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate is antidotal. 2-PAM is also antidotal and may be administered in conjunction with atropine. Solvents present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

See side panel for precautionary statement

ACCEPTED
with COMMENTS
in EPA Letter Dated

AUG 22 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under FPA Reg. No.
66222-7

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WARRANTY STATEMENT

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instruction, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

Manufactured by: Makhteshim-Agan of North America Inc.
551 Fifth Avenue, Suite 1100
New York, NY 10176

EPA Reg. No. 66222-9

Net Content _____

EPA Est. No. _____

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. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Avoid contamination of food and feed. Food utensils such as table 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. Do not permit pets to go onto treated areas until spray has dried,

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.

Applicators and other handlers must wear: 1) long sleeved shirt and long pants; 2) chemical-resistant gloves, such as barrier laminate, butyl rubber (> 14 mils), nitrile rubber (> 14 mils), and Viton (> 14 mils); and, 3) shoes plus socks.

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

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USER SAFETY RECOMMENDATIONS

Users should:

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

ENGINEERING CONTROLS STATEMENT

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. If waterfowl, i.e., 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. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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.

DIRECTIONS FOR USE

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

Failure to follow the directions for use and precautions on this label may result in poor insect control, crop injury, or illegal residues.

Chemigation

Refer to specific section in this label for chemigation use directions for cranberries. Do not apply this product to cranberries through any type of irrigation system unless the specific directions for chemigation are followed. Do not apply this product to any other crop or site through any type of irrigation system.

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), notification to workers, and restricted-entry interval. The requirements of this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. Exception: if the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: 1) coveralls; 2) chemical-resistant gloves such as barrier laminate, butyl rubber (> 14 mils), nitrile rubber (> 14 mils), or Viton (> 14 mils); and, 3) shoes plus socks.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

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 use on humans or permit children to go onto treated areas until spray has completely dried.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until sprays have dried. Protective clothing means, at least, a hat or other suitable head covering, long-sleeved shirt and long-legged trousers or a coverall type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with product. When oral warnings are given, warnings shall be in a language customarily understood by the workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by the workers.

Written warnings must include the following information: Signal Word: WARNING. Area treated with diazinon on (date of application). Do not enter without appropriate protective clothing until sprays have dried. (Insert State Department of Agriculture reentry interval if more restrictive). In case of accidental exposure: Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to diazinon and describe his condition. For further information see the Precautionary Statements and Statement of Practical Treatment.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

NOTE: The California Department of Agriculture has set a 5-day reentry for Diasol on citrus, grapes, peaches, and nectarines. Five days should elapse between the time of application and the time a worker may enter the field to engage in any activity requiring substantial contact with treated foliage. When a mixture of two or more organic phosphate pesticides is applied, the interval shall be prolonged by adding to the longest application interval an additional 50% of that interval.

STORAGE AND DISPOSAL

Storage: Do not contaminate water, food, or feed by storage or disposal. Store in a dry place.

Container Disposal: Triple rise (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state or local authorities.

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

In case of minor spills, follow all precautions indicated above and clean up immediately. Sweep up and dispose of wastes and broken or empty containers in a landfill approved for pesticide use.

GENERAL INFORMATION

Diasol AG500 is an emulsifiable solution which, when diluted with water according to directions, is intended for the control of insect pests of agricultural crops. Do not use in barns or dwellings. Do not use on livestock. Do not use in food crops grown in greenhouses.

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

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 Diasol AG500, 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. When handling this product, wear the personal protective equipment listed on this label.

In the directions for use which follow, best control is obtained when application is made at the first sign of insects. Applications should be repeated as necessary to maintain control.

CHEMIGATION

APPLICATION THROUGH AN IRRIGATION SYSTEM (CHEMIGATION) — CRANBERRIES ONLY

DIASOL AG500 may be applied alone or in combination with other pesticides registered for application through sprinkler irrigation systems to cranberries. To insure compatibility, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for five minutes. If the combination remains mixed or can be remixed readily, the mixture is compatible.

Do not apply this product through any type of irrigation system to other crops. For chemigation, apply this product to cranberries only through sprinkler irrigation systems. Do not apply this product to cranberries through any other type of irrigation system.

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 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 apply 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 *DIASOL* AG500 needed to treat the acreage to be treated. Refer to the specific directions for use for cranberries for the application rate and the amount of water per acre.
3. Add the pre-measured *DIASOL* AG500 to the chemigation system supply tank and dilute with water if needed. Proper agitation is needed if *DIASOL* AG500 is tank mixed with other pesticides registered for sprinkler 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.

Fruit and Nut Crops

DIASOL 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 *DIASOL* 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 *DIASOL* 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.

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
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
Boysenberries	7
Cherries	21
Cranberries	7
Dewberries	7
Grapes	28
Loganberries	7
Nectarines	21
Peaches	21
Plums, Prunes	21

Crop	PHI*
Raspberries	7
Strawberries	5
Walnuts	45

* PHI = Pre-Harvest Interval or the number of days between the last application and harvest, may vary based on use pattern selected. See specific directions for use on grapes.

** = Dormant spray only.

Note: To protect bees, do not apply this product 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, Paratona Scale	1-1 1/2 pts. + 2-3 gals. dormant oil or 1-1 1/2 gals. superior type oil in 100 gals. of water	Apply as a dormant spray. Do not apply more than 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 application after 14 days if necessary.
	Olive Scale Crawlers	1/2 pt. + 1 1/2 gals. of light medium horticultural 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.

Canberries (CA, OR and WA only) (Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries)	Leafhoppers, Thrips, Aphids, Two-spotted Spider Mites, Raspberry Fruitworms, Raspberry Sawflies	1 qt. per acre	Apply as insects occur. Repeat application after 14 days if necessary. Do not make more than 5 applications per season. Do not apply within 7 days of harvest or illegal residues may occur. 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. per acre	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. Do not apply within 7 days of harvest or illegal residues may occur.
	Raspberry Crown Borers (Raspberry Root Borers)	2 qts. per acre	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.
Cherries	Eyespotted Bud Moths, Fruit Tree Leafrollers	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 3-4 applications beginning at petal fall and continuing through the growing season as infestations occur. Allow 7 days between applications.
	Cherry Fruitflies	1/2-1 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.
	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 make more than 3 applications per season. (2) 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. (3) Allow a minimum of 21 days between the last application and harvest.

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Crop	Pest	Rate	Timing/Special Directions
Cranberries	Blackheaded Fireworms (<i>Rhopobota neevensi</i>)	2 qts. in a minimum of 15 gals. of water per acre for ground application and up to 400 gals. of water per acre for chemigation.	Apply when pest appears. Repeat application after 14 days if necessary. A maximum of 6 applications per season is permitted. Do not apply within 7 days of harvest or illegal residues may occur.
	Cranberry Fruitworms	3 qts. in a minimum of 15 gals. of water per acre for ground application and up to 400 gals. of water per acre for chemigation.	Apply when pest appears. Repeat application after 14 days if necessary. A maximum of 4 applications per season is permitted. Do not apply within 7 days of harvest or illegal residues may occur.

Note: This product may be applied to cranberries through sprinkler irrigation. Refer to the Chemigation section for specific chemigation directions for use.

Grapes	Pacific Spider Mites, Leafhoppers, Grape Berry Moths, Grape Leafhoppers, Omnivorous Leafhoppers, Aphids, Spider Mites	1-2 pts. per acre in a minimum of 100 gals. of water	Apply as pest occurs as a thorough cover spray. Repeat application after 7 days if necessary.
	<i>Drosophila</i> spp.	6 fl. oz. per acre in a minimum of 100 gals. of water (300 gals. of water maximum)	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. per acre per season. (2) To avoid illegal residues allow 28 days between the last application and harvest.

Nectarines	Oriental Fruit Moths	1 pt. in 100 gals. of water	Apply at 100% petal fall. Make 2 additional applications at 10-15 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 application 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) Allow a minimum of 21 days between the last application and harvest.

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 application after 14 days if necessary.
	Oriental Fruit Moths	1 pt. in 100 gals. of water	Apply at 100% petal fall. Make 2 additional applications at 10-15 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 applications.
	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.
	White Peach Scale	1½-2 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 applications (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) 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	½-1 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) 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.
	Leucur 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) Allow a minimum of 21 days between the last application and harvest.

Strawberries	Aphids, Two-spotted Spider Mites	1 pt. in 100 gals. of water per acre	Apply as pests occur. Repeat application if necessary every 7 days, but do not make more than 3 applications per season. Do not apply within 5 days of harvest or illegal residues may occur.
	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. Do not make more than 3 foliar applications per season. Do not apply within 5 days of harvest or illegal residues may occur. Application may be made to plants after harvest.
	Mole Crickets	1 qt. per acre	Broadcast in sufficient water to obtain even coverage when insects are present. Apply 1-2 days before transplanting and immediately incorporate into the top 1-2 inches of soil.
	Strawberry Leafrollers	3/4-1 pt. in 100 gals. of water	Apply 200 gals. of spray per acre when blossoms show color. Do not apply within 5 days of harvest or illegal residues may occur.
Walnuts (CA only)	Aphids, Spider Mites	1 qt. per acre	Apply as a foliar spray Repeat application in 14 days if necessary. Do not make more than 3 applications per season. Do not apply within 45 days of harvest or after husks open or illegal residues may occur. Make ground applications in a minimum of 100 gals of water per acre
	Codling Moths, Scale Crawlers, Walnut Caterpillars	3 qts. per acre	

Vegetable Crops

For foliar or soil applications. *DIASOL* AG500 should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. *DIASOL* 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

Crop	Ground Application		Aerial Application Minimum Gals./Acre
	Minimum Gals./Acre	OR Minimum Gals./1,000 Sq. Ft.	
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
Casaabas	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	5
Honeydew Melons	5	1	5
Kale	10	2	5
Lettuce, Head	10	2	5
Lettuce, Leaf	10	2	5
Muskmelons	5	1	5

Crop	Ground Application		Aerial Application Minimum Gals./Acre
	Minimum Gals./Acre	OR Minimum Gals./1,000 Sq. Ft.	
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
Spinach	10	2	5
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
Spinach	14
Squash, Summer	7

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

Crop	PHI* (Days)
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 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) (succulent only)	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Black Bean Aphids, Mexican Bean Beetles, Dipterous Leafminers	1-1 1/2 pts. per acre	Apply as insects occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season. Do not apply within 7 days of harvest or illegal residues may occur.
	Cucumber Beetles	3/4 pt. per acre	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.
Beans, Lima (succulent only)	Leafhoppers Spider Mites	1 pt. per acre	Apply as pests occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season. 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. Note: To protect bees, do not apply foliarly if the crop or weeds in the treatment area are in bloom.
Beans, Red (Tubers)	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Dipterous Leafminers	1/2-1 pt. per acre	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.
Broccoli	Root Maggots	2-3 qts. per acre	Apply to plant beds or fields just before sowing of seed or transplanting and immediately incorporate into the top 3-4 inches of soil.
		4-8 oz. per 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 to 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 plant reduction due to plant stress at time of transplanting.

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Crop	Pest	Rate	Timing/Special Directions
Broccoli (continued)	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	½-1 pt. per acre	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.
Brussels Sprouts	Root Maggots	2-3 qts. per acre	Apply to plant beds or fields just before sowing of seed or transplanting and immediately incorporate into the top 3-4 inches of soil.
		4-8 oz. in 50 gals. of water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply ½-1 cup (4 to 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. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms	½-1 pt. per acre	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.
Cabbage	Root Maggots	2-3 qts. per acre	Apply to plant beds or fields just before sowing of seed or transplanting and immediately incorporate into the top 3-4 inches of soil.
		4-8 oz. in 50 gals. of water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply ½-1 cup (4 to 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. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	½-1 pt. per acre	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 21 days of harvest, or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.

Crop	Pest	Rate	Timing/Special Directions
Carrots	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids	1 pt. per acre	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.
Cauliflower	Root Maggots	2-3 qts. per acre	Apply to plant beds or fields just before sowing of seed or transplanting 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 to 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. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids Diamondback Moths, Imported Cabbageworms Dipterous Leafminers	1/2-1 pt. per acre	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 5 days of harvest or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.
Chinese Broccoli	Aphids Diamondback Moths Imported Cabbageworms Dipterous Leafminers	1/2-1 pt. per acre	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. Note: Diazinon will not control organophosphate-resistant leafminers.
Chinese Cabbage (Bok Choy and Napa)	Aphids, Diamondback Moths, Imported Cabbageworms Dipterous Leafminers	1/2-1 pt. per acre	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. Note: Diazinon will not control organophosphate-resistant leafminers.
Chinese Mustard (Gai Choy)	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	1/2-1 pt. per acre	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. Note: Diazinon will not control organophosphate-resistant leafminers.
Chinese Radish (Japanese Radish or Daikon) (FL and CA only)	Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers	1 pt. per acre	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. Do not apply within 10 days of harvest or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.

Crop	Pest	Rate	Timing/Special Directions
Collards	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Harlequin bugs, Corn Earworms	1/2-1 pt. per acre	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.
Cucumbers	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	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. per acre	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.
Endive (Escarole)	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers	1/2-1 pt. per acre	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: Diazinon will not control organophosphate-resistant leafminers.
Ginseng	Leafhoppers, Aphids, Lygus Bugs, Flea Beetles, Jumping Plant Lice	1/2-1 pt. per acre	Spray when insects first appear. For heavy insect infestations, use 1 pt. per acre. Apply by ground equipment using 10 to 100 gals. of water per acre. Do not apply more than one application per growing season. Do not apply during flowering of three or four 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. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moths, Imported Cabbageworms, Harlequin bugs, Corn Earworms	1/2-1 pt. per acre	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.
Lettuce	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.

Crop	Pest	Rate	Timing/Special Directions
Lettuce (continued)	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids. Dipterous Leafminers	1/2-1 pt. per acre	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: Diazinon will not control organophosphate-resistant leafminers.
Melons (Cantaloupes, Casabas, Crenshaws, Honeydews, Muskmelons, Persians, and Hybrids of these) and Watermelons	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	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. per acre	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.
Mustard	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminers, Diamondback Moths, Imported Cabbageworms	1/2-1 pt. per acre	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. Note: Diazinon will not control organophosphate-resistant leafminers.
Onions (Bulb and Green)	Onion Maggots	2-4 qts. per acre	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. per acre	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. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
Parsley	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
Parsnips	Aphids, Flea Beetles, Dipterous Leafminers	1/2-1 pt. per acre	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.
Peas (succulent only)	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

Crop	Pest	Rate	Timing/Special Directions
Peas (succulent only) (continued)	Aphids. Dipterous Leafminers	$\frac{3}{4}$ -1 pt. per acre	Apply as insects occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season. To avoid illegal residues, allow a minimum of 7 days between the last application and harvest. 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. Notes: (1) Diazinon will not control organophosphate-resistant leafminers. (2) To protect bees, do not apply locally if the crop or weeds in the treatment area are in bloom.
Peppers	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids. Serpentine Leafminers	$\frac{1}{2}$ -1 pt. per acre	Apply as insects appear. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 5 days of harvest or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.
Potatoes	Cutworms (Surface and Subterranean)	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Southern Potato Wireworms (Southeastern U.S.)	2-4 qts. per acre	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.
	Aphids. Flea Beetles. Colorado Potato Beetles Dipterous Leafminers	$\frac{1}{2}$ - $\frac{3}{4}$ pt. per acre	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 illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers.
	Banded Cucumber Beetles Leafhoppers Southern Armyworms	$\frac{3}{4}$ -1 pt. per acre	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 illegal residues may occur.
Note: Do not use on commercially grown potatoes which will be hand-harvested			
Radishes	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids. Flea Beetles. Dipterous Leafminers	$\frac{1}{2}$ -1 pt. per acre	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. Note: Diazinon will not control organophosphate-resistant leafminers.

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Crop	Pest	Rate	Timing/Special Directions
Spinach	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil.
	Aphids, Dipterous Leafminers	1/2-1 pt. per acre	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: Diazinon will not control organophosphate-resistant leafminers.
Squash, Summer	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil.
	Aphids, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites	1/2-1 1/2 pts. per acre	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. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil.
	Aphids, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites	1/2-1 1/2 pts. per acre	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.
Sweet Corn	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Seed Corn Maggots	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast before planting and immediately incorporate into the top 4-6 inches of soil.
	Corn Earworms	1-1 1/4 qts. per acre	Apply when silks first appear. Repeat application every 7 days if necessary. Do not make more than 5 applications per season.
	Corn Rootworm (Adults)	1/2-1 pt. per acre	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. per acre	Apply in sufficient water to provide complete coverage to the upper portions of the plants. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.
	Grasshoppers, Spider Mites, Flea Beetles	1 pt. per acre	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. per acre	Consult local agricultural 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 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. Flea Beetles	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil.
Swiss Chard	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil.
	Aphids. Imported Cabbageworms. Diamondback Moths. Harlequin bugs	1/2-1 pt. per acre	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. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil.
	Aphids. Dipterous Leafminers	1/2 pt. per acre	Apply as insects appear. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.
	Banded Cucumber Beetles. Fall Armyworms Southern Armyworms. Beet Armyworms	1/4-1 pt. per acre	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. per acre	
Turnips, Roots and Tops	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)
	Mole Crickets	1 qt. per acre	Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-6 inches of soil.
	Aphids. Flea Beetles Dipterous Leafminers	1/2-1 pt. per acre	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.

Field Crops

Soil and foliar applications of *DIASOL* 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)
Hoops	14
Sugar Beets	14

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

Crop	Pest	Rate	Timing/Special Directions
Hops	Aphids, Spider Mites	1 qt. per acre	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.
	Wireworms	3-4 qts. per acre	Broadcast just before planting. Incorporate into soil 4-6 inches. Do not apply more than 7 qts. of this product to the soil, per season.
Sugar Beets	Beet Leafhoppers, Dipterous Leafminers, Aphids	¾-1 pt. per acre	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: Diazinon will not control organophosphate-resistant leafminers.
	Grasshoppers	1 pt. per acre	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: Tops may be fed to beef and dairy animals.

Grassland Insects

Ditch Banks, Roadside, Wetland, Noncrop Areas, Barrier Strips

Grasshoppers: Spray ¾-1 pt. per acre in water (minimum of 1 gal. of water per acre) 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 per acre) 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

To control certain insects on Arborvitae, Azalea, Birch, Boxwood, Camellia, Carnation, Chrysanthemum, Douglas Fir, Elm, Gladioli, Hawthorn, Holly, Juniper, Lilac, Locust, Maple, Oak, Pine, Ornamental Plum, Poplar, Rhododendron, Rose, Spruce and Willow, apply the recommended rates indicated below. Try to spray underside of leaves and penetrate dense foliage.

Insects	Amount of DIAZINON AG-500 to Use	
	Rate Per 3 Gals. Water	Rate Per 100 Gals. Water
Aphids, Bagworms, Carnation Bud Mites, Carnation Shoot Mites, Clover Mites, Cyclamen Mites, Dipterous Leafminers, European Pine Shoot Moths, European Red Mites, Flea Beetles, Holly Bud Moths, Leafhoppers, Obscure Root Weevils, Omnivorous Leafhoppers, Privet Mites, Scale Crawlers (Cottony Cushion), Lecanium, Pine Needle San Jose, Soft, Thrips, Two-spotted Spider Mites, Juniper Webworms, Whiteflies	½ fl. oz. *	1 pt. **
Apple-and-Thorn Skeletonizers, Cotoneaster Webworms, Fall Webworms, Hemlock Chermes, Oak Looper, Obliquebanded Leafrollers, Pear Slugs, Tent Caterpillars	1½ fl. oz. *	3 pts. **

* 1 fl. oz. = 2 tablespoons

** 16 fl. oz. = 1 pint

Precaution: Do not use on Ferns, Poinsettias, Hibiscus, Papaya, Pile, and Gardenia, since injury to the plants may occur.

Mimosa Webworms: Mix ½ 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 sprays. If waterfowl, i.e., ducks or geese, can be expected to enter the treated area after treatment (except spot treatments), water lawn with at least ¼ inch water immediately after application, however, stop watering before puddling occurs.

To control pests listed below, apply recommended rates.

Pest	Rate/1000 sq. ft.		Remarks
	DIASOL 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 (Collembore)	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, mow grass and water well before treatment, 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.
Hyperoos 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 Chaffer, Southern Chaffer)	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 (Collembore)

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 into houses, spray a five-foot band of soil around the house next to the foundation and spray the foundation of the house to a height of 2-3 feet. Repeat application as necessary. Do not apply to animals. Do not treat plants (other than tree trunks) at this nuisance pest rate.