

522488

APR 25 1997

Mr. Lee Tharrington
MICRO FLO Company
P.O. Box 5948
Lakeland, FL 33807-5948

Dear Ms. Tharrington:

Subject: Amendment- Comply with Agency letter of November 22, 1996
Diazinon 4E
EPA Registration Number 51036-197
Your submission dated April 16, 1997

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

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a) In the PERSONAL PROTECTIVE EQUIPMENT recommendation, please note that Novartis (CIBA) indicates Category F rather than Category G for chemical resistance. Is there a reason for this difference?
 - b) In the Environmental Hazards revise "if waterfowl, i.e. ducks or geese, can be ..." to read "if waterfowl (ducks or geese) can be ...".
 - c) Relocate the new cranberry irrigation water statement from the second paragraph under the heading DIRECTIONS FOR USE to the NOTES under the crop entry for Cranberries (see item "h", below).
 - d) Add "to wait" between "days" and "between" in the PHI note under the PHI table for Fruits and Nuts.

- e) Throughout the Fruits and Nuts directions, in the NOTES about PHI intervals, start each such sentence with "To avoid illegal residues,". Your label is inconsistent in this regard.
- f) In the directions for the crop Caneberries, delete "Do not make more than 5 applications per season. Do not apply within 7 days of harvest or illegal residues may occur." from the directions for control of Leafhoppers, etc. and delete "Do not apply within 7 days of harvest, or illegal residues may occur." from the directions for control of Dryberry Mites and then under all the directions for Caneberries add a Notes section as follows:

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.

- g) For the crop Cranberries, in the directions for control of Blackheaded Fireworms, replace "Apply when pest appears." with "Apply to larval stage. Pheromone trap captures and sweep monitoring may be used to optimize treatment timing.". Retain the rest of the text as is, except that you may chose to delete the PHI sentence and have it appear in the revised NOTES (see item "h", below).
- h) Also for the crop Cranberries, for Cranberry Fruitworms the rate should be 2-3 qts. and in the directions replace the current text with "Cranberry growth stage and/or berry inspection for eggs may be used to optimize treatment timing; consult your local extension agent or pest management adviser. 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 is permitted for the 2 qt. rate.". These revised directions do not include the PHI sentence since it will appear in the Notes. Add a NOTES section as follows:

NOTES: (1) Do not apply more than 12 qts. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest. (3) This product may be applied to cranberries through sprinkler irrigation. Refer to the "Chemigation" section for specific chemigation directions for use. (4) DO NOT USE WATER FROM IRRIGATED OR FLOODED CRANBERRY BEDS FOR DRINKING PURPOSES OR TO IRRIGATE CROPS OTHER THAN THOSE APPEARING ON EPA APPROVED DIAZINON LABELS.

- i) For the crop Strawberries, delete "Do not apply within 5 days of harvest or illegal residues may occur." from the

directions for control of Aphids, etc., Cyclamen Mites, and Strawberry Leafrollers since this same limitation will appear in the new Notes for this crop entry (see below). Also, delete "Application may be made to plants after harvest." from the directions for control of Cyclamen Mites. Such a post-harvest use is not supported by the residue data submitted by CIBA (Novartis). Add a NOTES section as follows:

NOTES: Do not apply more than 1 qt. of product 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.

- j) In the directions for the crop Walnuts delete "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." from the directions and then add a Notes section as follows: 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.
- k) Add "to wait" between "days" and "between" in the PHI note under the PHI table for Vegetables.
- l) For all Vegetable Crops entries that include the pest Mole Crickets, you may replace "Apply to plant beds or fields 1 to 2 days before sowing of seed or transplanting and immediately incorporate into the top 1 to 2 inches of soil." with "One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil."
- m) For all Vegetable Crops entries that include the pest Root Maggots, you may replace "Apply to plant beds or fields just before sowing of seed or transplanting and immediately incorporate into the top 3-4 inches of soil." with "Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil."
- n) For the crop Sweet Potatoes, delete the pest Flea Beetles appearing with Wireworms since soil incorporation is not appropriate as a control for the foliar pest Flea Beetles.
- o) Add "to wait" between "days" and "between" in the PHI note under the PHI table for Field Crops.
- p) In the directions paragraph for Insect Control on Ornamentals, add "Repeat as necessary." to appear after "dense foliage."

- q) In the LAWN PEST CONTROL Precautions, in the sixth sentence revise "If waterfowl, i.e., ducks or geese, can be" to read "If waterfowl (ducks or geese) can be".
 - r) In the Lawn Pest Control table, revise the directions for control of Frit Flies to read "For frit flies, before treatment mow grass and water well, but delay application until grass is dry."
3. Submit three (3) copies of your final printed labeling before you release the product for shipment.

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

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

Sincerely,

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

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

For retail sale to and use by Certified Operators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification.

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

DIAZINON 4E
ORGANOPHOSPHATE

ACTIVE INGREDIENT: 0,0-diethyl 0-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate48.0%

INERT INGREDIENTS:..... 52.0%

TOTAL.....100.0%

This product contains 4 pounds Diazinon Insecticide per gallon.
*Contains xylene range solvents

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 this 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. If not breathing, apply 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: Diazinon is a cholinesterase inhibitor. Atropine sulfate is antidotal. 2-PAM is also antidotal and may be administered but only in conjunction with atropine. This product contains xylene range aromatic solvent which may present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

EPA Reg.No. 51036-197

EPA Est. No. 51036-GA-1

ACCEPTED
with COMMENTS
in EPA Letter Dated

APR 25 1997

Manufactured By
MICRO FLO COMPANY
P.O. BOX 5948
LAKELAND, FLORIDA 33807

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
51036-197

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 or feed. Food utensils such as tablespoons 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.

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 G 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 or viton ≥ 14 mils
3. Shoes plus socks

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

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.

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 and waterfowl. Avoid overlapping of sprays. On lawns, if waterfowl, i.e., ducks or

geese, can be expected in the treated area after treatment (except spot treatment), apply a minimum of 1/4 inch of water immediately after applying this product. Stop irrigation before puddling occurs. 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.

DIRECTIONS FOR USE

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

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. Do not use water from irrigated or flooded cranberry beds for drinking purposes or to irrigate crops other than those appearing on EPA approved diazinon labels.

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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI).

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 direct 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 or viton \geq 14 mils
3. Shoes plus socks

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

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of 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 enter or allow entry into treated areas until sprays have dried. Do not permit children or pets to go onto sprayed grass until spray has completely dried.

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. If pesticide, spray mixture or rinsates cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER: 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.

GENERAL INFORMATION

Diazinon 4E 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.

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

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

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 Diazinon 4E, 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.

CHEMIGATION

APPLICATION THROUGH AN IRRIGATION SYSTEM (CHEMIGATION) - CRANBERRIES ONLY

Diazinon 4E 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 waste 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 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 Diazinon 4E 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 Diazinon 4E to the chemigation system supply tank and dilute with water if needed. Constant agitation is required to keep the product in solution when Diazinon 4E is used alone or 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

REI - 24 HOURS

Diazinon 4E may be applied using ground or aerial application equipment as specified in the table below. This table also indicates the minimum amount of water that can be used for the various methods of application. The rate of Diazinon 4E for aerial spray or concentrated spray applied by ground equipment is based on a dilute full cover spray applied to fruit or nut trees with conventional ground equipment at a rate of 300-400 gallons 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 pint of Diazinon 4E per 100 gallons of water, this amounts to 3-4 pts. of product per acre when applied to fruit trees at usual dilute ground spray volumes of 300-400 gallons 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 use for individual crops.

Crop	Aerial Application Minimum Gals./Acre	Ground Application 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 application and total number of applications that can be made 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
Raspberries	7
Strawberries	5
Walnuts	45

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

** = Dormant spray only

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

Crop	Pest	Rate	Timing/Special Directions
Almonds (CA only) The REI for Almonds is 24 hours.	San Jose Scale, Parlatoria 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 The REI for Apricots is 24 hours.	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 in 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.

Crop	Pest	Rate	Timing/Special Directions
<p>Caneberries (CA, OR and WA only) (Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries)</p>	<p>Leafhoppers, Thrips, Aphids, Two-Spotted Spider Mites, Raspberry Fruitworm, Raspberry Sawflies</p>	<p>1 qt. per acre</p>	<p>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.</p> <p>Apply in a minimum of 100 gals. of water per acre (200 gals. per acre maximum)</p> <p>For raspberry fruitworm make one application when blossom buds separate. Make a second application immediately before blossoms open.</p>
	<p>Dryberry Mites</p>	<p>1-2 qts. per acre</p>	<p>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.</p> <p>Apply in a minimum of 100 gals. of water per acre. Do not apply within 7 days of harvest or illegal residues may occur.</p>
<p>The REI for Caneberries is 24 hours.</p>	<p>Raspberry Crown Borers (Raspberry Root Borers)</p>	<p>2 qts. per acre</p>	<p>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.</p>

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. 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.
	The REI for Cherries is 24 hours.	Cherry Rust Mites	1/2-1 pt. in 100 gals. of water

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.

Cranberries	Blackheaded Fireworms (<i>Rhopobota naevana</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.
The REI for Cranberries is 24 hours.	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.

Notes: (1) This product may be applied to cranberries through sprinkler irrigation. Refer to the section Chemigation for specific chemigation directions for use.

Grapes	Pacific Spider Mites, Leafhoppers, Grape Berry Moths, Grape Leafrollers, Aphids, Spider Mites, Omnivorous Leafrollers	1-2 pts. per acre in a minimum of 100 gals. of water	Apply as pests occur as a thorough cover spray when pest appears. Repeat application after 7 days if necessary.
The REI for Grapes is 24 hours, except in California (see below).	<i>Drosophila spp.</i>	6 fl. oz. per acre in a minimum of 100 gals. of water (300 gals. of water maximum)	Apply as a through cover spray. Repeat after 7 days if necessary.

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

NOTE: THE CALIFORNIA DEPARTMENT OF AGRICULTURE HAS SET A 5-DAY RE-ENTRY TO DIAZINON INSECTICIDE ON GRAPES. FIVE DAYS SHOULD LAPSE 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 pesticides are applied in combination, the interval shall be prolonged by adding to the longest applicable interval an additional 50% of that interval.

Crop	Pest	Rate	Timing/Special Directions
Nectarines	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.
The REI for Nectarines is 24 hours, except in California (see below).	Oriental Fruitmoths	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.

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. NOTE: THE CALIFORNIA DEPARTMENT OF AGRICULTURE HAS SET A 5-DAY RE-ENTRY TO DIAZINON INSECTICIDE ON NECTARINES. FIVE DAYS SHOULD LAPSE 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 pesticides are applied in combination, the interval shall be prolonged by adding to the longest applicable interval an additional 50% of that interval.

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.
	Peach Twig Borers	1 pt. in 100 gals. of water	Apply as insects occur in May and June. Allow 7 days between applications.
	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.

Peaches, continued	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	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 applications (7 days apart) may be needed. Do not apply before fruit is harvested.
The REI for Peaches is 24 hours, except in California (see below).			

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. NOTE: THE CALIFORNIA DEPARTMENT OF AGRICULTURE HAS SET A 5-DAY RE-ENTRY TO DIAZINON INSECTICIDE ON PEACHES. FIVE DAYS SHOULD LAPSE 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 pesticides are applied in combination, the interval shall be prolonged by adding to the longest applicable interval an additional 50% of that interval.

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	
The REI for Plums is 24 hours.			

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.

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	
The REI for Prunes is 24 hours.			

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.

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.
The REI for Strawberries is 24 hours.	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 with 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.
The REI for Walnuts is 24 hours.	Codling Moths, Scale Crawlers, Walnut Caterpillars	3 qts. per acre	

Vegetable Crops

REI - 24 HOURS

For foliar or soil applications, Diazinon 4E should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. Diazinon 4E may be applied aerially or by ground application as specified in the following table. The specific amount of product to be used appears under the separate directions for use for each crop.

Crop	Ground Application		Aerial Application
	Minimum OR Gals./Acre	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	5
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
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.

Pre-Harvest Intervals (PHI*) for Foliar Applications

Observe stated time intervals between last application and harvest as well as intervals between and maximum numbers of applications per season.

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 Radish	10
Chinese Mustard	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
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 DIRECTION
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.

<p>Beans (continued)</p> <p>The REI for Beans is 24 hours.</p>	<p>Cucumber Beetles</p>	<p>3/4 pt. per acre</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>Make cucumber beetle application in 100 gals. of water per acre.</p> <p>Note: 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>
<p>Beans, Lima (succulent only).</p> <p>The REI for Lima Beans is 24 hours.</p>	<p>Leafhoppers, Spider Mites</p>	<p>1 pt. per acre</p>	<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>
<p>Beets, Red (Table)</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)</p>

Red Beets, continued	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. 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.

The REI for Red Beets is 24 hours.

Broccoli, continued The REI for Broccoli is 24 hours.	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, 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.

<p>Brussel Sprouts, continued</p>		<p>4-8 oz. in 50 gals. of water</p>	<p>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.</p> <p>NOTE: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.</p>
	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)</p>
	<p>Mole Crickets</p>	<p>1 qt. per acre</p>	<p>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.</p>
	<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>
<p>The REI for Brussel Sprouts is 24 hours.</p>	<p>Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>

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 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.

The REI for Cabbage is 24 hours.

<p>Cabbage, continued</p>	<p>Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>
<p>Carrots</p> <p>The REI for Carrots is 24 hours.</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.)</p>
	<p>Mole Crickets</p>	<p>1 qt. per acre</p>	<p>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.</p>
	<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>
	<p>Aphids</p>	<p>1 pt. per acre</p>	<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>

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 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.

<p>Cauliflower, continued</p> <p>The REI for Cauliflower is 24 hours.</p>	<p>Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>
<p>Chinese Broccoli</p> <p>The REI for Chinese Broccoli is 24 hours.</p>	<p>Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>
<p>Chinese Cabbage (Bok Choy and Napa).</p> <p>The REI for Chinese Cabbage is 24 hours.</p>	<p>Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>

<p>Chinese Mustard (Gai Choy)</p> <p>The REI for Chinese Mustard is 24 hours.</p>	<p>Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>
<p>Chinese Radish (Japanese Radish or Daikon) (FL and CA only)</p> <p>The REI for Chinese Radish is 24 hours.</p>	<p>Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers</p>	<p>1 pt. per acre</p>	<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>
<p>Collards</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil (See Soil Incorporation Note)</p>
	<p>Mole Crickets</p>	<p>1 qt. per acre</p>	<p>Apply to plant beds or fields 1-2 days before sowing or seed or transplanting and immediately incorporate into the top 1-2 inches of soil.</p>

<p>Collards, continued</p> <p>The REI for Collards is 24 hours.</p>	<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>
<p>Cucumbers</p> <p>The REI for Cucumbers is 24 hours.</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil (See Soil Incorporation Note)</p>
	<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>
	<p>Aphids, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworms</p>	<p>1 pt. per acre</p>	<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> <p>Note: Diazinon will not control organophosphate- resistant leafminers.</p>
<p>Endive (Escarole)</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)</p>

<p>Endive, continued</p> <p>The REI for Endive is 24 hours.</p>	<p>Mole Crickets</p>	<p>1 qt. per acre</p>	<p>Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into top 1-2 inches of soil.</p>
	<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>
	<p>Aphids, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>
<p>Ginseng</p> <p>The REI for Ginseng is 24 hours.</p>	<p>Leafhoppers, Aphids, Lygus Bugs, Flea Beetles, Jumping Plant Lice</p>	<p>3/4-1 pt. per acre</p>	<p>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.</p>
<p>Kale</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil (See Soil Incorporation Note)</p>

Kale, continued The REI for Kale is 24 hours.	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.
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.
	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.

<p>Lettuce, continued</p> <p>The REI for Lettuce is 24 hours.</p>	<p>Aphids, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<p>Apply as insects occur. Repeat application, 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>
<p>Melons (Cantaloupes, Casabas, Crenshaws, Honeydew, Muskmelons, Persians, and Hybrids of these) and Watermelons</p> <p>The REI for Melons is 24 hours.</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)</p>
	<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>
	<p>Aphids, Dipterous Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites</p>	<p>1/2-1 1/2 pts. per acre</p>	<p>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.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
<p>Mustard</p>	<p>Mole Crickets</p>	<p>1 qt. per acre</p>	<p>Apply to plant beds 1-2 days before planting and immediately incorporate into the top 1-2 inches of soil.</p>

Mustard, continued	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Cutworms	2-4 qts. per acre	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)
	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. Note: Diazinon will not control organophosphate- resistant leafminers.
The REI for Mustard is 24 hours.			
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. (See Soil Incorporation Note) 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.

Onions, continued The REI for Onions is 24 hours.	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
Parsley The REI for Parsley is 24 hours.	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 The REI for Parsnips is 24 hours.	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.

<p>Peppers, continued</p> <p>The REI for Peppers is 24 hours.</p>	<p>Aphids, Serpentine Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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 5 days of harvest or illegal residues may occur.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>
<p>Potatoes</p>	<p>Cutworms (Surface and Subterranean)</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil (See Soil Incorporation Note)</p>
<p>Southern Potato Wireworms (Southeastern U.S.)</p>	<p>2-4 qts. per acre</p>	<p>For potatoes grown on mineral soils in the Southeast, apply prior to planting and immediately incorporate into the top 3-6 inches of soil depending on location of wireworms.</p>	
<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>	
<p>Aphids, Flea Beetles, Colorado Potato Beetles, Dipterous Leafminers</p>	<p>1/2-3/4 pt. per acre</p>	<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 35 days of harvest or illegal residues may occur.</p> <p>Note: Diazinon will not control organophosphate-resistant leafminers.</p>	

Spinach The REI for Spinach is 24 hours.	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	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.
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 4-8 inches of soil.

<p>Squash, Summer (continued)</p> <p>The REI for Squash is 24 hours.</p>	<p>Aphids, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites</p>	<p>1/2-1 1/2 pts. per acre</p>	<p>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.</p> <p>Note: Diazinon will not control organophosphate- resistant leafminers.</p>
<p>Squash, Winter</p> <p>The REI for Squash is 24 hours.</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)</p>
	<p>Wireworms</p>	<p>3-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.</p>
	<p>Aphids, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites</p>	<p>1/2-1 1/2 pts. per acre</p>	<p>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.</p> <p>Note: Diazinon will not control organophosphate- resistant leafminers.</p>
<p>Sweet Corn</p>	<p>Cutworms</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note)</p>
	<p>Seed Corn Maggots</p>	<p>2-4 qts. per acre</p>	<p>Broadcast just before planting and immediately incorporate into the top 2 inches of soil.</p>

Sweet Corn, continued	Wireworms	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 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 in 7 days, if necessary. Do not make more than 5 applications per season.
	Grasshoppers, Spider Mites, Fleabeetles	1 pt. per acre	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.
	The REI for Corn is 24 hours.	Sap Beetles	2-2 1/2 pt. per acre

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.

Sweet Potatoes The REI for Sweet Potatoes is 24 hours.	Wireworms, Flea Beetles	3-4 qts. per acre	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
Swiss Chard The REI for Swiss Chard is 24 hours.	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, 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 4-8 inches of soil.

Tomatoes (continued)	Aphids, Dipterous Leafminers	1/2 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 1 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	
	Banded Cucumber Beetles, Fall Armyworms, Southern Armyworms, Beet Armyworms	3/4-1 pt. per acre	
The REI for Tomatoes is 24 hours.			
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 4-8 inches of soil.

<p>The REI for Turnips is 24 hours.</p>	<p>Aphids, Flea Beetles, Dipterous Leafminers</p>	<p>1/2-1 pt. per acre</p>	<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>
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Field Crops

REI - 24 HOURS

Apply soil and foliar applications of Diazinon 4E in sufficient water to ensure thorough coverage for foliar applications. Observe stated time intervals between last application and harvest, as well as intervals between applications and total number of applications that can be made per season:

Pre-Harvest Intervals (PHI*) For Foliar Applications

Crop	PHI*
Hops	14
Sugar Beets	14

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

Crop	Pest	Rate	Timing/Special Directions
<p>Hops</p> <p>The REI for Hops is 24 hours.</p>	<p>Aphids, Spider Mites</p>	<p>1 qt. per acre</p>	<p>Apply as pests occur. Repeat applications, 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. per acre	Broadcast just before planting. Incorporate into soil 4-6 inches. Do not apply more than 4 qts. of this product to the soil, per season.
	Beet Leafhoppers, Dipterous Leafminers, Aphids	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 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.

The REI for Sugar Beets is 24 hours.

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

Grassland Insects

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

Grasshoppers: Spray 3/4-1 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 food or feed.

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Insect Control on Ornamentals

REI - 12 HOURS

To control certain insects on ornamentals, such as Arborvitae, Azalea, Birch, Boxwood, Camellia, Carnation, Chrysanthemum, Douglas Fir, Elm, Gladioli, Hawthorn, Holly, Juniper, Lilacs, 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	
	Rate per 3 gals water	Rate per 100 gals. water
Aphids, Bagworms, Carnation Bud Mites, Carnation Shoot Mites, Clover Mites, Cyclamen Beetles, Holly Bud Moths, Leafhoppers, Obscure Root Weevils, Omnivorous Leaf-tiers, Privet Mites, Scale Crawlers (Cottoncushion, Lecanium, Pine Needle, San Jose, Soft), Thrips, Two-Spotted Spider Mites, Juniper Webworms, Whiteflies	1/2 fl. oz.*	1 pt.**
Apple-and-Thorn Skeletonizers, Cottoneaster Webworms, Fall Webworms, Hemlock Chemes, Oak Loopers, Obliquebanded Leafrollers, Pear Slugs, Tent Caterpillars	1 1/2 fl. oz.*	3 pts.**

* 1 Fl. oz. = 2 tablespoons

** 16 Fl. oz. = pint

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

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

Lawn PEST Control (Excluding Sod Farms and Golf Courses)

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 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.

Pests	Rate/1000 sq. ft.		Remarks
	Diazinon 4E	Water	
Lawn Chinch Bugs	2-3 fl. oz.	3 gals.	Use higher rate for longer residual control and in turfgrass of dense growth such as St. Augustine.
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 product 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.
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, (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 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.

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 of 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 MICRO FLO or the Seller. All such risks shall be assumed by the Buyer.

MICRO FLO 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. MICRO FLO makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall MICRO FLO or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product. MICRO FLO 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 MICRO FLO.