

10163-241

03/29/2002

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ms. Terre Farrell
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

MAR 29 2002

Dear Ms. Farrell:

Subject: Amendment - Comply with 2000 Diazinon MOA;
Delete Beans, Cucumbers, Parsley,
Parsnips, Peas, Peppers, Potatoes,
Summer Squash, Winter Squash,
Sweet Potatoes, Swiss Chard, Turnips,
Grassland Insects, Indoor Ornamentals,
and Nuisance Pests
Update First Aid per PR Notice 2001-1; and
Update CSF/replacement diazinon source
Gowan Diazinon 5F
EPA Registration Number 10163-241
Your submission dated September 19, 2001

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

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. Directly under the heading FIRST AID add "Organophosphate".
 - b. In the last item of the If Swallowed advice in the FIRST AID section, revise "...an unconscious person" to read "...an unconscious or convulsing person".
 - c. In the Environmental Hazards, delete the 2 sentences that refer to the now deleted use on lawns. Specifically, delete the sentence beginning "Because of...", and the sentence beginning "On lawns, if waterfowl...".
 - d. Under the heading GENERAL INFORMATION, revise the sentence "Do not apply this product to food crops grown in greenhouses." to read "Do not apply this product in greenhouses."

- e. Under the heading Chemigation Systems Connected to Public Water Systems, at the end of item 1 delete "2."
 - f. For Caneberries and Strawberries, add the hyphen in the pest name "Two-spotted Spider Mites".
 - g. In the minimum gallonage table for VEGETABLE CROPS, revise "Casabas" to read "Casaba Melons", and revise "Crenshaws" to read "Crenshaw Melons".
 - h. In the paragraph under the VEGETABLE CROPS minimum gallonage table, revise the sentence "Do not apply to food crops grown in greenhouses." to read "Do not apply in greenhouses."
 - i. In the NOTES under the heading VEGETABLE CROPS, since you have deleted the use on peas, revise item 2 by deleting "to peas if these crops or weeds in the treatment area are in bloom or".
 - j. For Beets, for consistency you may want to relocate "Do not make more than 5 application per season." to appear in the bulleted notes box at the end of the directions for that crop.
 - k. For Broccoli, add "Do not make more than 5 application per season." to the bulleted notes box.
 - l. For Cauliflower, for consistency you may want to revise and relocate ", up to 5 times," from the Aphids directions to instead appear as "Do not make more than 5 application per season." in the bulleted notes box.
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.

The Basic Confidential Statement of Formula (CSF) dated September 19, 2001 which identifies a replacement diazinon source Manufacturing Use Product is acceptable and has been added to this product's registration file.

Sincerely,

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

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

THIS PRODUCT MUST NOT BE USED ON GOLF COURSES AND SOD FARMS.

GOWAN DIAZINON 5F

**Water-Based Concentrate
Insecticide**

For control of certain pests on fruits, nuts, vegetables, field crops, and ornamentals

ACCEPTED
with COMMENTS
in EPA Letter Dated
MAR 29 2002
Under the Federal Insecticide
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
10163-24

ACTIVE INGREDIENT: Diazinon O,O-diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate.....	% BY WT. 56.0%
OTHER INGREDIENTS*	44.0%
	TOTAL 100.0%

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.)

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.	

**FOR EMERGENCY MEDICAL RESPONSE AND HAZARD COMMUNICATION ONLY, CALL
HAZARD INFORMATION SERVICES AT 1 (888) 478-0798**

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Applicators and other handlers must wear:**
- Long-sleeved shirt and long pants
 - Waterproof gloves
 - Shoes plus socks

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.

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

NET CONTENTS _____ GALLONS



USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Because of the migratory habits of Atlantic coast waterfowl, do not apply this product to lawns in Nassau County, New York between November 1 and May 20. Do not exceed maximum permitted label rates. Rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Avoid overlapping of sprays. On lawns, if waterfowl (ducks or geese) can be expected in the treated area after treatment (except spot treatment), apply at least ¼ 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 washwaters.

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.

DIRECTIONS FOR USE

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

Reformulation of repackaging of this product is prohibited.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (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 contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

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 Gowan Diazinon 5F, do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See STATEMENT OF PRACTICAL TREATMENT section of this label.

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

PHYTOTOXICITY STATEMENT

As is common with most emulsifiable concentrate formulations, adverse effects such as spotting or discoloration of the fruit or foliage can occur. Some conditions known to contribute to phytotoxicity include but are not limited to: high temperatures, poor spray drying conditions, excessive spray runoff, certain spray mixtures, stage of crop development, or tank mixes with other pesticides.

GENERAL INFORMATION

Gowan Diazinon 5F is a water-based concentrate which, when diluted with water according to the directions, is intended for the control of 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.

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

SPRAY EQUIPMENT

Applications of Gowan Diazinon 5F using sufficient water volume to provide thorough and uniform coverage generally provide the most effective pest control.

To avoid spray drift, do not apply when conditions favor drift from beyond the target area. Avoid overlap because crop injury may occur. Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate sprayer before use.

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

MIXING PROCEDURES

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

1. **Gowan Diazinon 5F Alone:** Add ½ of the required amount of water to the mix tank. With the agitator running, add Gowan Diazinon 5F to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the product has completely dispersed into the mix tank. Maintain agitation until all of the mixture has been applied.
2. **Gowan Diazinon 5F in Tank Mixture:** Note: Do not mix Gowan Diazinon 5F with any formulation of Captan® or Captec® because crop injury may occur. Gowan Diazinon 5F is compatible with most insecticide and fungicide products; however, physical compatibility with tank-mix partners should be tested before use. Using a quart jar, add the proportionate amounts of each product to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. In the combination remains mixed, or can be readily remixed, the products are compatible.

Once compatibility has been proven, add ½ of the required amount of water to the tank mix. Start the agitator running before adding any tank-mix partners. Add tank-mix partners in this order: all products in water-

soluable packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, and emulsifiable concentrates. Always allow each tank-mix partner to fully disperse before adding the next product. Maintain sufficient agitation while adding the remainder of the water and until all of the mixture has been applied.

When using Gowan Diazinon 5F in tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix products' labels. Confirm that the tank-mixture is safe to the crop by spraying a small area first, and evaluating crop safety after an appropriate period. Do not treat larger areas until crop safety has been confirmed.

AERIAL APPLICATION

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

CHEMIGATION (APPLICATION THROUGH IRRIGATION SYSTEMS)

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

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an 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 should the need arise.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

1. Public water systems 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 a least 25 individuals daily at least 60 days out of the year. 2.

2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

SPRINKLER AND DRIP (TRICKLE) CHEMIGATION

1. The system must contain a functional check-valve, a vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not use sprinkler chemigation when wind speeds favors drift beyond the area intended for treatment.

OPERATING INSTRUCTIONS

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

Note: When treatment with Gowan Diazinon 5F has been completed, further field irrigation over the treated area should be avoided for 48 hours to prevent washing the product off of the crop. Apply Gowan Diazinon 5f only in sufficient irrigation water to achieve thorough plant coverage. Excess water will wash the product from the plant, resulting in poor control. To avoid a hazard to animals, wells, or adjoining crops, do not allow irrigation water to collect or runoff.

FRUIT AND NUT CROPS - REI 24 hours

Gowan Diazinon 5F 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 method of application.

Crop	Aerial Application	Ground Application	
	Min. GPA	Min. GPA	Min. GPA
		Dilute	Concentrate
Almonds*	20	100	20
Apples	20	100	20
Apricots	20	100	20
Blackberries**	20	100	20
Blueberries	20	100	20
Boysenberries**	20	100	20
Cherries	20	100	20
Cranberries	5	15	-
Dewberries**	20	100	20
Grapes	20	100	20
Loganberries**	20	100	20
Nectarines	20	100	20
Peaches	20	100	20
Pears	20	100	20
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

Note: To protect bees, do not apply to fruit trees when trees or substantial numbers of weeds in the orchard are in bloom. The rate of Gowan Diazinon 5F 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 gallons of water per acre. The specific amount of product to be used appears under the separate directions for use for each crop. In no case should the amount of product per acre exceed the maximum amount per acre per application that is specified in the directions for individual crops.

FRUIT AND NUT CROPS

CROP	PEST	RATE	COMMENTS
ALMONDS (California Only)	San Jose Scale, Parlatoria Scale	12¼ - 19 fl. oz. + 2-3 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. water	Apply only as a single dormant spray.
	• Do not apply more than 76½ oz. of diazinon or 9 gals. of oil per acre.		
APPLES (See text for PHI)	Codling Moth, Rosy Apple Aphid, Green Apple Aphid, Woolly Apple Aphid, Plum Curculio	12¼ fl. oz. in 100 gals. water	Begin treatment when infestations first occur. Do not repeat applications closer than 14 days. Do not apply after petal fall.
	San Jose Scale Crawler, Forbes Scale Crawler	12¼ fl. oz. in 100 gals. water	Apply early in the season when crawlers first appear. If infestation warrants, make a second application 14 days later. Do not apply after petal fall.
	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borer, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybug	12¼ fl. oz. + 2 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. water	Apply only as a dormant or delayed dormant spray. Do not apply more than 51 fl. oz. of product or 6 gals. of oil per acre per application.
	Leafhoppers	12¼ fl. oz. in 100 gals. water.	Apply at petal fall. Do not apply after petal fall.
	Eyespotted Bud Moth, Fruit Tree Leafroller, Mealybug	12¼ fl. oz. in 100 gals. water	Begin treatment at pink stage. Do not repeat application closer than 14 days. Do not apply after petal fall.
• Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. of product per acre per season.			
• Do not apply after petal fall.			

FRUIT AND NUT CROPS (continued)

CROP	PEST	RATE	COMMENTS
APRICOTS (21)	Aphids, Brown Mite (Clover Mite), Two-spotted Spider Mite, Olive Scale Crawler, San Jose Scale Crawler	12¼ fl. oz. in 100 gals. water	Apply as infestations occur. Repeat application after 14 days if necessary..
	Olive Scale Crawler	6½ fl. oz. + 1½ gals. of light medium horticultural oil in 100 gals. water	Apply when scale crawlers are present. Do not apply more than 51 fl. oz. of product or 6 gals. of oil per acre per application.
	Apricot Mealybug	12¼ fl. oz. in 100 gals. water	Apply as a cover spray from petal fall to June. Allow 14 days between applications.
	<ul style="list-style-type: none"> Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. 		
BLUEBERRIES (7)	Cranberry Fruitworm, Cherry Fruitworm, Blueberry Maggot, Aphids, Thrips, Two-spotted Spider Mite	25½ fl. oz./A	Apply as infestations occur. Allow 14 days between applications.
	Fire Ant	25½ fl. oz./A	To aid in the control of fire ants, slowly apply 1 gal. of dilute mixture over and 6 inches around each fire ant mound. Apply gently to avoid disturbing ants. Use equipment capable of delivering the diluted product as a gentle rain. High pressure sprays may disturb the ants and cause migration, reducing product effectiveness.
	<ul style="list-style-type: none"> Do not apply more than 25½ fl. oz. of product per acre per application and no more than 127 ½ fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum, of 7 days between the last application and harvest. For best results, apply in cool weather, 65-80° F, or in early morning or late evening hours. 		
CANEBERRIES: Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries) (California, Oregon and Washington only) (7)	Leafhoppers, Thrips, Aphids, Twospotted Spider Mite, Raspberry Fruitworm, Raspberry Sawfly	25½ fl. oz./A in 100 gals. water	Apply as insects occur. Repeat application after 14 days if necessary. Apply in a minimum of 100 gals. of water per acre (200 gals. per acre maximum). For Raspberry Fruitworms, make one application when blossom buds separate. Make a second application immediately before blossoms open.
	Dryberry Mite	25½-51 fl. oz./A in 100 gals. water	Apply as a dormant spray in the early spring when canes are still on the ground and buds are closed. Make a second application when buds are well developed, but still closed. Apply in a minimum of 100 gals. of water per acre (200 gals./A maximum)..
	Raspberry Crown Borer (Raspberry Root Borer)	51 fl. oz./A	Apply in 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.
	<ul style="list-style-type: none"> Do not apply more than 51 fl. oz. of product per acre per application and no more than 127 ½ fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 7 days between the last application and harvest. 		
CHERRIES (21)	Eyespotted Bud Moth, Fruittree Leafroller	12¼ fl. oz. in 100 gals. water	Apply in cover spray as infestations occur beginning at petal fall. Repeat application after 7 days if necessary.
	Leafhoppers	12¼ fl. oz. in 100 gals. water	Make 3 applications beginning at petal fall and continuing through the growing season as infestations occur. Allow 7 days between applications.
	Cherry Fruitfly	6½-12¼ fl. oz. in 100 gals. water	Make 3-4 applications beginning when adult flies begin to emerge and repeating at 10-day intervals.
	Black Cherry Aphid	12¼ fl. oz. in 100 gals water	Apply as a cover spray when aphids appear. Repeat application after 10 days , if necessary.
	San Jose Scale Crawler	12¼ fl. oz. in 100 gals. water	Apply during the pre-pink stage or when crawlers first appear.
	Cherry Rust Mite	6½-12¼ fl. oz. in 100 gals. water	Apply to trees as a single supplemental spray after harvest.
	<ul style="list-style-type: none"> Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. 		

FRUIT AND NUT CROPS (continued)

CROP	PEST	RATE	COMMENTS
CRANBERRIES (7)	Blackheaded Fireworm (<i>Rhopobota naevana</i>)	51 fl. oz./A	Apply to larval stage. Pheromone trap captures and sweep monitoring may be used to optimize treatment timing. Repeat application after 14 days, if necessary. A maximum of 6 applications per season is permitted.
	Cranberry Tipworm	51 fl. oz./A	Presence of damage is not an indicator of active infestation. For best results, target early-stage larvae. Repeat application after 14 days, if necessary. A maximum of 6 applications is permitted.
	Cranberry Fruitworm	51-76½ fl. oz./A	Cranberry growth stage and/or berry inspection for eggs may be used to optimize treatment timing; consult your local extension agent or pest management advisor. Repeat application every 14 days, as needed. A maximum of 4 applications per season is permitted for the 76 ½ fl. oz. rate. A maximum of 6 applications per season is permitted for the 51 fl. oz. rate.
	<ul style="list-style-type: none"> • This product may be applied to cranberries via ground, aerial, or sprinkler irrigation. For ground application, apply the product in a minimum of 15 gals. of water per acre, for aerial application, a minimum of 5 gals. of water per acre, for chemigation, up to 400 gals. of water per acre. Refer to the Chemigation section of this label for specific chemigation directions. • 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. • Do not apply more than 306 fl. oz. of product per acre per season. • To avoid illegal residues, allow a minimum of 7 days between the last application and harvest. 		
GRAPES (28)	Pacific Spider Mite, Leafhoppers, Grape Berry Moth, Grape Leafroller, Omnivorous Leafroller, Aphids, Spider Mite	12¼-25½ fl. oz./A in a minimum of 100 gals. water	Apply as a thorough cover spray. Repeat application after 7 days, if necessary.
	<i>Drosophila</i> spp.	4¾ fl. oz./A in a minimum of 100 gals. water (300 gals water maximum)	Apply as a thorough cover spray. Repeat application after 7 days, if necessary.
	<ul style="list-style-type: none"> • Do not apply more than 25½ fl. oz. of product per acre per application and no more than 127 ¼ fl. oz. per acre per season. • To avoid illegal residues, allow 28 days between the last application and harvest. 		
NECTARINES (21)	Oriental Fruit Moth	12¾ fl. oz. in 100 gals. 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 Mite (Clover Mite), Two-spotted Spider Mite, Olive Scale Crawler, San Jose Scale Crawler, Peach Twig Borer	12¾ fl. oz. in 100 gals. water	Apply as infestations occur. Repeat application after 14 days if necessary.
	<ul style="list-style-type: none"> • Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. per acre per season. • To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. 		
PEACHES (21)	Aphids, Brown Mite (Clover Mite), Two-spotted Spider Mite, Olive Scale Crawler, San Jose Scale Crawler	12¾ fl. oz. in 100 gals. water	Apply as infestations occur. Repeat application after 14 days, if necessary.
	Oriental Fruit Moth	12¾ fl. oz. in 100 gals. 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 Borer	12¾ fl. oz. in 100 gals. water	Apply as insects occur in May and June. Allow 7 days between applications.
	Leafhoppers	12¾ fl. oz. in 100 gals. water	Make 3 applications beginning at petal fall and continuing through the growing season. Allow at least 7 days between applications.
	White Peach Scale	19-25½-fl. oz. in 100 gals. 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.
	<ul style="list-style-type: none"> • Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. of product per acre per season. • To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. 		

FRUIT AND NUT CROPS (continued)

CROP	PEST	RATE	COMMENTS
PEARS (21)	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Pear Leaf Blister Mite Eggs, Twig Borer, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybug	12½ fl. oz. + 2-3 gals. dormant oil or 1-1 ½ gals. superior type oil in 100 gals. water	Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre.
	Pear Psylla	6½-12½ fl. oz. in 100 gals. water	Apply as a cover spray at pre-pink stage. Make 1-2 additional applications during the first and second cover sprays, if necessary.
	Tentiform Leafminer, Mealybug	12½ fl. oz. in 100 gals. water	Make 3 cover sprays, beginning in April.
	Codling Moth, Rosy Apple Aphid, Green Apple Aphid, Woolly Apple Aphid, Spider Mite	12½ fl. oz. in 100 gals. water	Make 3 cover sprays, beginning as infestations occur. Note: Mites will be suppressed if diazinon is used in this regular cover spray program.
	Apple Maggot	12½ fl. oz. in 100 gals. water	Make 3 cover sprays when flies are active and laying eggs. Note: Diazinon will not control organophosphate-resistant apple maggots.
	San Jose Scale Crawler, Forbes Scale Crawler	12½ fl. oz. in 100 gals. water	Apply early in the season when crawlers first appear. If infestation warrants, make a second application 14 days later.
<ul style="list-style-type: none"> Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. Allow at least 14 days between applications. 			
PLUMS (21)	Brown Mite (Clover Mite), European Red Mite	12½ fl. oz. in 100 gals. water	Apply as needed every 7 days.
	Leafcurl Plum Aphid, Mealy Plum Aphid, Thistle Aphid	6½-12½ fl. oz. in 100 gals. water	
<ul style="list-style-type: none"> Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. 			
PRUNES (21)	Brown Mite (Clover Mite), European Red Mite	12½ fl. oz. in 100 gals. water	Apply as needed every 7 days.
	Leafcurl Plum Aphid, Mealy Plum Aphid, Thistle Aphid	6½-12½ fl. oz. in 100 gals. water	
<ul style="list-style-type: none"> Do not apply more than 51 fl. oz. of product per acre per application and no more than 153 fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. 			
STRAWBERRIES (5)	Aphids, Twospotted Spider Mite	12½ fl. oz. in 100 gals. water per acre	Apply as pests occur. Repeat application, if necessary, after 7 days.
	Cyclamen Mite	25½ fl. oz. in 100 gals. water per acre	Direct spray to the plant crowns. Plants should be sufficiently agitated to ensure thorough coverage of the foliage. Repeat application after 7 days, if necessary.
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast in sufficient water to obtain even coverage and immediately incorporate into the top 1-2 inches of soil.
	Strawberry Leafroller	9½-12½ fl. oz. in 100 gals. water	Apply 200 gals. of spray per acre when blossoms show color.
<ul style="list-style-type: none"> Do not apply more than 25½ fl. oz. per acre per application; and no more than 102 fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 5 days between the last application and harvest. 			
WALNUTS (California only) (45)	Aphids, Spider Mite	25½ fl. oz./A	Apply as a foliar spray. Repeat application in 14 days, if necessary. Make ground applications in a minimum of 100 gals. of water per acre.
	Codling Moth, Scale Crawler, Walnut Caterpillar	76½ fl. oz./A	
<ul style="list-style-type: none"> Do not apply more than 76½ fl. oz. of product per acre per application, and no more than 229 ½ fl. oz. of product per acre per season. To avoid illegal residues, allow a minimum of 45 days between the last application and harvest and do not apply after husks open. 			

10/15

VEGETABLE CROPS - REI 24 hours

For foliar or soil applications, Gowan Diazinon 5F should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. Gowan Diazinon 5F 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 Min. GPA	(Ground) Min. Gals. 1000 Sq. Ft.	Aerial Application Min. GPA
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 and 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
Persian Melons	5	1	5
Radishes	10	2	5
Spinach	10	2	5
Sweet Corn	20	4	5
Tomatoes	10	2	5
Watermelons	5	1	5

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

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.

VEGETABLE CROPS

CROP	PEST	RATE/ACRE	COMMENTS
BEETS, RED (Table) (14)	Cutworms	51-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
	Dipterous Leafminer	6½-12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season.
<ul style="list-style-type: none"> Do not apply within 14 days of harvest, or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers. 			

VEGETABLE CROPS (continued)

CROP	PEST	RATE/ACRE	COMMENTS
BROCCOLI (7)	Root Maggot	51-76½ fl. oz./A	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		3¼-6½ fl. oz. per 50 gals. water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 3¼ - 6½ fl. oz. per plant by hand or by tractor-mounted sprayer equipped with drp nozzles to direct spray to the base of the plant.
	<ul style="list-style-type: none"> • Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting. 		
	Cutworms	51-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
	Aphids, Diamondback Moth, Imported Cabbageworm, Dipterous Leafminer	6½-12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
<ul style="list-style-type: none"> • Do not apply within 7 days of harvest, or illegal residues may occur. • Note: Diazinon will not control organophosphate-resistant leafminers. 			
BRUSSELS SPROUTS (7)	Root Maggot	51-76½ fl. oz./A	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		3¼-6 fl. oz. in 50 gals. water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 3 ¼-6 ½ fl. oz. per plant by hand or by tractor-mounted sprayer equipped with drop nozzles to direct spray to the base of the plant.
	<ul style="list-style-type: none"> • Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting. 		
	Cutworms	51-102 fl. oz./A.	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ -102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moth, Imported Cabbageworm	6½-12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
<ul style="list-style-type: none"> • Do not make more than 5 applications per season. • Do not apply within 7 days of harvest, or illegal residues may occur. 			
CABBAGE (21)	Root Maggot	51-76½ fl. oz./A	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		3¼ -6½ fl. oz. in 50 gals. of water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 3 ¼ - 6 ½ fl. oz. per plant by hand or by tractor-mounted sprayer equipped with drop nozzles to direct spray to the base of plant.
	<ul style="list-style-type: none"> • Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting 		
	Cutworms	51 - 102 fl. oz./A.	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
	Aphids, Diamondback Moth, Imported Cabbageworm, Dipterous Leafminer	6½-12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
<ul style="list-style-type: none"> • 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. 			
CARROTS (14)	Cutworms	51-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids	12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> • Do not make more than 5 applications per season. • Do not apply within 14 days of harvest, or illegal residues may occur. 		

VEGETABLE CROPS (continued)

CROP	PEST	RATE/ACRE	COMMENTS
CAULIFLOWER (7)	Root Maggot	51-76½ fl. oz./A	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.
		3¼ - 6½ fl. oz. in 50 gals. water	In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 3 ¼ - 6 ½ fl. oz. per plant by hand or by tractor-mounted sprayer equipped with drop nozzles to direct spray to the base of the plant.
	<ul style="list-style-type: none"> Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting. 		
	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moth, Imported Cabbageworm, Dipterous Leafminer	6½ -12% fl. oz./A	Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications.
<ul style="list-style-type: none"> Do not apply within 7 days of harvest, or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers. 			
CHINESE BROCCOLI (10)	Aphids, Diamondback Moth, Imported Cabbageworm, Dipterous Leafminer	6½ -12% fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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) (10)	Aphids, Diamondback Moth, Imported Cabbageworm, Dipterous Leafminer	6½ -12% fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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) (10)	Aphids, Diamondback Moth, Imported Cabbageworm, Dipterous Leafminer	6½ -12% fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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) (10)	Aphids, Diamondback Moth, Imported Cabbageworm, Dipterous Leafminer	12% fl. oz./A	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.
	<ul style="list-style-type: none"> 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. 		
COLLARDS (10)	Cutworms	51-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moth, Imported Cabbageworm, Harlequin Bugs, Corn Earworm	6½ - 12% fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> Do not make more than 5 applications per season. Do not apply within 10 days of harvest, or illegal residues may occur. 		
ENDIVE (Escarole) (14)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminer	6½ - 12% fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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. 		

VEGETABLE CROPS (continued)

CROP	PEST	RATE/ACRE	COMMENTS
GINSENG (30)	Leafhoppers, Aphids, Lygus Bugs, Flea Beetles, Jumping Plant Lice	9½ - 12¼ fl. oz./A	Spray when insects first appear. For heavy insect infestations, use 12 ¾ fl. oz. Apply by ground equipment, using 10-100 gals. of water per acre.
	<ul style="list-style-type: none"> 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 (10)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Diamondback Moth, Imported Cabbageworm, Harlequin Bug, Corn Earworm	6½ - 12¼ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> Do not make more than 5 applications per season. Do not apply within 10 days of harvest, or illegal residues may occur. 		
LETTUCE (14)	Cutworms	51-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminer	6½-12¼ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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. 		
MELONS (Cantaloupes, Casabas, Crenshaws, Honeydews, Muskmelons, Persians, and hybrids of these), WATERMELONS (3)	Cutworms	51-102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminer, Thrips, Striped Cucumber Beetle, Melonworm, Leafhoppers, Spider Mites	6½ - 19 fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
<ul style="list-style-type: none"> 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 (10)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
	Aphids, Dipterous Leafminer, Diamondback Moth, Imported Cabbageworm	6½ - 12¼ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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), LEEKS, SPRING ONIONS OR SCALLIONS, JAPANESE BUNCHING ONIONS, GREEN SHALLOTS, GREEN ESCHALOTS (14)	Onion Maggot	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil. Note: Diazinon will not control organophosphate-resistant onion maggots.
	Onion Thrips	12¼ fl. oz./A	Apply as thrips appear. Repeat application, as necessary, every 7 days. Do not make more than 3 applications per season. Do not apply within 14 days of harvest, or illegal residues may occur.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

VEGETABLE CROPS (continued)

CROP	PEST	RATE/ACRE	COMMENTS
RADISHES (14)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Flea Beetles, Dipterous Leafminer	6½ - 12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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. 		
RUTABAGAS (14)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Incorporation Note).
	Mole Crickets	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate in to the top 4-8 inches of soil.
	Aphids, Flea Beetles, Dipterous Leafminer	6 - 12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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. 		
SPINACH (14)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminer	6½ - 12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> 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. 		
SWEET CORN (7)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Seedcorn Maggot	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Corn Earworm	25½ - 32 fl. oz./A	Apply when silks first appear. Repeat application every 7 days, if necessary.
	Corn Rootworm (Adult)	6½ - 12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	Corn Leaf Aphid	12¾ - 25½ fl. oz./A	Apply in sufficient water to provide complete coverage to the upper portions of the plants. Repeat application, as necessary, every 7 days.
	Grasshoppers, Spider Mites, Flea Beetles	12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	Sap Beetle	25½ - 32 fl. oz./A	Consult local agricultural authorities for proper timing of sprays. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> Do not make more than 5 applications per season. To protect bees, do not apply foliarly to corn during the pollen shed period. Allow 7 days after the last application before grazing or cutting for forage. Forage may be fed to beef, dairy cattle, and sheep. Corn may be picked 7 days after the last application. 		
TOMATOES (1)	Cutworms	51 - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note).
	Mole Cricket	25½ fl. oz./A	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.
	Wireworms	76½ - 102 fl. oz./A	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	Aphids, Dipterous Leafminer	6½ fl. oz./A	Apply as insects appear. Repeat application, as necessary, every 7 days.
	Banded Cucumber Beetle, Fall Armyworm, Southern Armyworm, Beet Armyworm	9½ - 12¾ fl. oz./A	Apply as insects appear. Repeat application, as necessary, every 7 days.
	Vinegar Fly (<i>Drosophila</i> spp.)	6½ - 19 fl. oz./A	Apply as insects appear. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> Do not make more than 5 applications per season. Do not apply within one day of harvest, or illegal residues may occur. Note: Diazinon will not control organophosphate-resistant leafminers. 		

FIELD CROPS - REI 24 HOURS

Soil and foliar applications of Gowan Diazinon 5F 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

FIELD CROPS

CROP	PEST	RATE/ACRE	COMMENTS
HOPS (14)	Aphids, Spider Mites	25½ fl. oz./A	Apply as pests occur. Repeat application, as necessary, every 14 days.
	• Do not make more than 4 applications per season.		
SUGAR BEETS (14)	Wireworms	76 ½-102 fl. oz./A	Broadcast just before planting. Incorporate into soil 4-6 inches
	• Do not apply more than 102 fl. oz. of this product to the soil per season.		
	Aphids, Beet Leafhopper, Dipterous Leafminer	9½-12¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	Grasshoppers	12 ¾ fl. oz./A	Apply as insects occur. Repeat application, as necessary, every 7 days.
	<ul style="list-style-type: none"> • Do not make more than 5 applications per season. • Note: Sugar beet tops may be fed to beef and dairy animals. • Note: Diazinon will not control organophosphate-resistant leafminers. 		

ORNAMENTALS GROWN OUTDOORS IN NURSERIES

Before treating a large number of ornamental plants with Gowan Diazinon 5F alone or as a tank mixture with any other material, make a test application on a few plants and observe for 7 to 10 days prior to treating large areas to reduce the possibility of plant injury.

INSECT CONTROL ON ORNAMENTALS - REI 12 HOURS

CROP	PEST	RATE	COMMENTS
ARBORVITAE, AZALEA, BIRCH, BOXWOOD, CAMELLIA, CARNATION, CHRYSANTHEMUM, CRAB APPLE, DOGWOOD, DOUGLAS FIR, ELM, EUONYMUS, GLADIOLI, HAWTHORN, HOLLY, HONEY LOCUST, HONEYSUCKLE, JUNIPER, LILAC, LILY, LOCUST, MAPLE, MARIGOLD, OAK, PANSY, PETUNIA, PINE, ORNAMENTAL PLUM, POPLAR, RHODODENDRON, ROSE, SCOTCH PINE, SPIREA, SPRUCE, SYCAMORE, WAX PLANT (Hoya), WILLOW, YELLOWWOOD and YEW	Aphids, Bagworm, Camation Bud Mite, Camation Shoot Mite, Clover Mite, Cyclamen Mite, Dipterous Leafminer, European Pine Shoot Moth, European Red Mite, Flea Beetles, Holly Bud Moth, Leafhoppers, Obscure Root Weevil, Omnivorous Leaf-tier, Privet Mite, Scale Crawler (Cottony-cushion, Lecanium, Pine Needle, San Jose, Soft), Thrips, Two-spotted Spider Mite, Juniper Webworm, Whitefly	½ fl. oz. per 3 gals. water or 12 ¾ fl. oz. per 100 gals. of water	Spray when listed pests first appear. Try to spray underside of leaves and penetrate dense foliage. Repeat as necessary.
	Apple-and-Thorn Skeletonizer, Cotoneaster Webworm, European Pine Sawfly, Fall Webworm, Hemlock Chermes, Oak Looper, Obliquebanded Leafroller, Pear Slug, Tent Caterpillar	1 ¼ fl. oz. per 3 gals. water or 38 ¾ fl. oz. per 100 gals. water	Spray when listed pests first appear. Try to spray underside of leaves and penetrate dense foliage. Repeat as necessary.
	Mimosa Webworm	½ fl. oz. in 3 gals. water or 12 ¾ fl. oz. in 100 gals. water	Apply as a thorough foliar spray when adults first appear. Try to spray underside of leaves and penetrate dense foliage. Make a second and third application at 4-5 week intervals.
<ul style="list-style-type: none"> • Do not use on Ferns, Poinsettia, Hibiscus, Papaya, Pilea, and Gardenia since injury to the plants may occur. • Note: 1 fl. oz. = 2 tablespoons; 16 fl. oz. = 1 pint 			

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal. Open dumping is prohibited. If freezing occurs, place the product in a warm room (68°F or above) and allow to thaw. Roll or shake container frequently until thawing is complete.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. To avoid harming aquatic organisms in rivers and other surface waters, do not pour the concentrate, spray mixture, or rinse water into sanitary drains (for example toilets, floor drains, and sinks) or into storm water sewers (for example, street drains). If pesticide, spray mixture, or rinsate cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: 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.

FOR 24 HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.

For other product information, contact Gowan Company or see Material Safety Data Sheet.

NOTICE ON CONDITIONS OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.