

Ms. Luz Piwonka
Drexel Chemical Company
P.O. Box 13327
Memphis, TN 38113-0327

JUL 26 1999

Dear Ms. Piwonka:

Subject: Amendment - Update label
Drexel Diazinon 50 WP
EPA Registration Number 19713-492
Your submission dated April 1, 1999

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) Revise the first of the **Notes** for Blueberries to read "Do not apply more than 2 lbs. of product per acre per application and no more than 10 lbs. of product per acre per season."
 - b) Add a **Notes** section for Caneberries as follows:

Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 10 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest.
 - c) For Pears, in the first grouping of pests capitalize the first letter of "pear" for the entry "Pear leaf blister mite eggs".
 - d) For Prunes, in the first grouping of pests capitalize the first letter of "mealy" for the entry "Meal plum aphid eggs".

- e) In the list of plants under the heading **INSECT CONTROL ON ORNAMENTALS**, correct "was plant (hoya)" to "wax plant (hoya)".
 - f) At the end of the introductory paragraph for **LAWN PEST CONTROL** (i.e., after "apply specified rates." add "Repeat as necessary."
 - g) Revise the **REMARKS** for Frit fly control in lawns 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.

The Agency understands that you will shortly be submitting updated formula statement(s) as required by the Agency's June 16, 1998 letter.

Sincerely,

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

3815

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.

**ACCEPTED
with COMMENTS
In EPA Letter Dated:**



JUL 26 1999
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
19713-492

Diazinon 50 WP

Insecticide

For control of certain insects and mites on fruits, nuts, vegetables, field crops, lawns and ornamentals. For specific pests, refer to use directions.

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

ACTIVE INGREDIENT:

Diazinon: 0,0-Diethyl 0-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate ... 50.0%

OTHER INGREDIENTS: 50.0%

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).

See **FIRST AID** Below

EPA Reg. No. 19713-492

EPA Est. No. 19713-GA-1

Net Contents: _____

FIRST AID

This product is an organophosphate.

IF SWALLOWED: Call a physician or Poison Control Center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth if person is unconscious or convulsing.

IF INHALED: Remove victim to fresh air. Apply artificial respiration if indicated. Get medical attention.

IF ON SKIN: Remove contaminated clothing and wash affected areas thoroughly with soap and water. Get medical attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

NOTE TO PHYSICIAN: If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing. Avoid contamination of food and feed. Food utensils, such as teaspoons or measuring cups, must not be used for food purposes after use in measuring pesticides. Keep out of reach of domestic animals. Do not use on humans or pets. Do not contaminate ornamental fish ponds. Be sure to read and follow "Work Safety Rules" and Worker Protection precautions appearing on this label. (Continued)

PRECAUTIONARY STATEMENTS (Continued)

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants, shoes plus socks and waterproof gloves. 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.

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.

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 migratory habits of Atlantic Coast waterfowl, do not apply this product to lawns in Nassau County, NY, 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 (ducks or geese) can be expected in the treated area after treatment (except spot treatment), apply a minimum of ¼ inch of water immediately after applying this product. Stop irrigation before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

This pesticide is highly toxic to bees exposed to direct treatment or to residues on blooming crops or weeds. Do not apply this pesticide or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

GENERAL INFORMATION

DIAZINON 50 WP is a wettable powder which should be mixed with sufficient water to assure thorough coverage, unless otherwise noted in the "Directions For Use".

Best control is obtained when application is made at first sign of pest. Application should be repeated only as directed to maintain control.

Manufactured By:

Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972



Since this product is a wettable powder formulation, constant agitation is necessary during application. To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, since crop or plant injury may result. Do not use on food crops grown in greenhouses.

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.

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, 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), restricted entry interval (REI) and notification to workers. 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 to treated areas during the restricted entry interval. Exception: If the product is 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 and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not 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.

NOTE: The California Department of Agriculture has set a 5-day re-entry for diazinon on grapes, nectarines and peaches. 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.

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 this product, do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See "First Aid" section of this label.

CHEMIGATION

Application Through an Irrigation System (Chemigation)--

Cranberries Only: This product 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 your State Extension Service specialists, equipment manufacturers or other experts. Do not connect the irrigation system used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments, if the need arises.

Chemigation System Connected to Public Water Systems

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily, at least 60 days out of the year.

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

Sprinkler Chemigation

1. The system must contain a functional check-valve, a vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Operating Instructions

1. Determine the acreage to be treated by the sprinkler system.
2. Measure the appropriate amount of this product 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 product to the chemigation system supply tank and dilute with water if needed. Constant agitation is required to keep the product in solution when this product 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 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.

FRUIT AND NUT CROPS

REI - 24 Hours.

This product may be applied using ground or aerial application equipment as specified in the following table. This table also indicates the minimum amount of water that can be used for the various methods of application. The rate of this product 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 to 400 gallons of water per acre. The specific amount of product to be used appears under the separate "Directions For Use" for each crop. (Note: "pounds or pounds of product" in the directions means pounds of this product, not pounds of active ingredient). If the "Rate" calls for 1 pound of this product per 100 gallons of water, this amounts to 3 to 4 pounds of product per acre when applied to fruit trees at usual dilute ground spray volumes of 300 to 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 "Directions For Use" for individual crops.

| Crop | Aerial Application | Ground Application | |
|--|------------------------|------------------------|-------------|
| | Minimum Gals. per Acre | Minimum Gals. per Acre | |
| | | Dilute | Concentrate |
| Almonds*, Apples, Apricots, Blackberries**, Blueberries, Boysenberries**, Cherries | 20 | 100 | 20 |
| Cranberries | 20 | 15 | -- |
| Dewberries**, Grapes, Loganberries**, Nectarines, Peaches, Pears | 20 | 100 | 20 |
| Pineapple | 20 | 200 | -- |
| Plums, Prunes, Raspberries**, Strawberries, Walnuts* | 20 | 100 | 20 |

*CA Only **CA, OR or WA Only

Observe stated time intervals between last application and harvest, as well as intervals between applications and total number of applications that can be made per season.

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

| Fruit and Nut Crop | Pests Controlled | Rate |
|--|--|--|
| Almonds (CA Only) | Apple aphid eggs, Apricot scale, Black cherry aphid eggs, Black scale, Brown mite eggs, Brown scale, European red mite eggs, Mealybug, Mealy plum aphid eggs, Parlatoria scale, San Jose scale, Twig borers | 1 to 1½ lbs. + 2 to 3 gals. dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a single dormant spray. Do not apply more than 6 lbs. of product or 9 gals. of oil per acre. | |
| Apples | Apple aphid eggs, Apricot scale, Black scale, Black cherry aphid eggs, Brown mite eggs, Brown scale, European red mite eggs, Mealybugs, Mealy plum aphid eggs, Parlatoria scale, San Jose scale, Twig borers | 1 lb. + 2 gals. dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a dormant or delayed dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. | |
| | Leafhoppers | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply, beginning at petal fall, as infestations develop. Repeat application in 14 days, if necessary. | |
| | Eyespotted bud moths, Fruitree Leafrollers, Mealybugs | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 cover sprays, beginning at pink stage. Do not repeat application closer than 14 days. | |
| | Codling moths, Green apple aphids, Rosy apple aphids, Spider mites, Woolly apple aphids | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 cover sprays beginning when infestations occur. Do not repeat applications closer than 14 days. Note: Mites will be suppressed if diazinon is used in the regular cover spray program. Slight russetting may occur on some varieties of apples such as Golden delicious. | |
| | Apple maggots | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 cover sprays when flies are active and laying eggs. Do not repeat applications closer than 14 days. Note: This product will not control organophosphate-resistant Apple maggots. | |
| Forbes scale crawlers, San Jose scale crawlers | 1 lb. in 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply early in the season when crawlers first appear. If infestation warrants, make a second application 14 days later. | | |

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

| Fruit and Nut Crop | Pests Controlled | Rate |
|---|---|--|
| Apricots | Apple aphid eggs, Apricot scale, Black scale, Black cherry aphid eggs, Brown mite eggs, Brown scale, European red mite eggs, Mealybugs, Mealy plum aphid eggs, Parlatoria scale, San Jose scale, Twig borers | 1 lb. + 2 gals. dormant oil or 1 to 1½ gals. superior type oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. | |
| | Aphids, Brown mites (Clover mites), Olive scale crawlers, San Jose scale crawlers, Two-spotted spider mites | 1 lb. in 10 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as infestations occur. Repeat application after 14 days, if necessary. | |
| | Olive scale crawlers | ½ lb. to 1½ gals. of light medium horticultural oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply when scale crawlers are present. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre per application. | |
| Apricot mealybugs | 1 lb. in 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply as a cover spray from petal fall to June. Allow 14 days between applications. | | |
| Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. | | |
| Blueberries | Aphids, Blueberry maggots, Cherry fruitworms, Cranberry fruitworms, Thrips, Two-spotted spider mites | 1 lb. per 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as infestations occur. Allow 14 days between applications. | |
| | Fire ants | 1 lb. in 100 gals. of water |
| TIMING/SPECIAL DIRECTIONS: To aid in control of Fire ants, slowly apply 1 gal. of diluted mixture over and 6 inches to each side of 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. Note: For best results apply in cool weather, 65° to 85°F, or in early morning or late evening hours. | | |
| Notes: (1) Do not apply more than 2 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest. | | |
| Caneberries, (Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries) (CA, OR and WA Only) | Aphids, Leafhoppers, Raspberry fruitworms, Thrips, Two-spotted spider mites | 2 lbs. per acre in a minimum of 100 gals. of water (200 gals. of water maximum) |
| | TIMING/SPECIAL DIRECTIONS: 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. For Raspberry fruitworms, make one application when blossom buds separate. Make a second application immediately before blossoms open. | |
| | Dryberry mites | 2 to 4 lbs. per acre in a minimum of 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: 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. | |
| Raspberry crown borers (Raspberry root borers) | 4 lbs. per acre in a minimum of 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply as a drench to the crown and lower canes in the Spring before buds break. | | |

| Fruit and Nut Crop | Pests Controlled | Rate |
|--|--|--|
| Cherries | Apple aphid eggs, Apricot scale, Black cherry aphid eggs, Black scale, Brown mite eggs, Brown scale, European red mite eggs, Mealybugs, Mealy plum aphid eggs, Parlatoria scale, San Jose scale, Twig borers | 1½ lbs. + 3 gals. dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. | |
| | Eyespotted bud moths, Fruitree leafrollers | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as infestations occur, beginning at petal fall. Repeat application after 7 days, if necessary. | |
| | Leathoppers | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 to 4 applications beginning at petal fall and continuing through the growing season as infestations occur. Allow 7 days between applications. | |
| | Cherry fruitflies | ½ to 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 to 4 applications beginning when adult flies begin to emerge and repeating at 10-day intervals. | |
| | Black cherry aphids | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a cover spray when aphids appear. Repeat application after 10 days, if necessary. | |
| San Jose scale crawlers | 1 lb. in 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply during the pre-pink stage or when crawlers first appear. | | |
| Cherry rust mites | ½ to 1 lb. in 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply as a single supplemental spray to trees after harvest. | | |
| Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per year. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. | | |
| Cranberries | Blackheaded fireworms (<i>Rhopobota naevana</i>) | 4 lbs. |
| | TIMING/SPECIAL DIRECTIONS: 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 fruitworms | 4 to 6 lbs. per acre |
| | TIMING/SPECIAL DIRECTIONS: 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 6 lb. rate. A maximum of 6 applications per season is permitted for the 4 lb. rate. | |
| | Cranberry tipworms | 4 lbs. |
| TIMING/SPECIAL DIRECTIONS: Presence of damage is not an indicator of active infestation. For best results, target early-stage larvae. Repeat application after 14 days if necessary. A maximum of 6 applications per season is permitted. | | |
| Notes: (1) This product may be applied to cranberries via ground, aerial or sprinkler irrigation. For ground application, apply the product in a minimum of 15 gals. of water per acre. For aerial application, a minimum of 20 gals. of water per acre and for chemigation, up to 400 gals. of water per acre. Refer to the "Chemigation" section of this label for specific chemigation directions. (2) Do not use water from irrigated or flooded Cranberry beds for drinking purposes or to irrigate crops other than those appearing on EPA-approved diazinon labels. (3) Do not apply more than 24 lbs. of product per acre per season. (4) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest. | | |

| Fruit and Nut Crop | Pests Controlled | Rate |
|---|--|--|
| Grapes | Aphids, Grape berry moths, Grape Leafrollers, Leafhoppers, Omnivorous Leafrollers, Pacific Spider mites, Spider mites | 1 to 2 lbs. per acre in a minimum of 100 gals. of water (200 gals. of water maximum) |
| | TIMING/SPECIAL DIRECTIONS: Apply as a thorough cover spray when pests appear. Repeat application after 7 days, if necessary. | |
| | <i>Drosophila</i> spp. | 6 oz. per acre in a minimum of 100 gals. of water (300 gals. of water maximum) |
| | TIMING/SPECIAL DIRECTIONS: Apply as a thorough cover spray at 7-day intervals. | |
| Notes: (1) Do not apply more than 2 lbs. product per acre per application and no more than 10 lbs. product per acre per season. (2) To avoid illegal residues, allow a minimum of 28 days between the last application and harvest. | | |
| Nectarines | Apple aphid eggs, Black cherry aphid eggs, Black scale, Brown scale, European red mite eggs, Mealybugs, Mealy plum aphid eggs, Parlatoria scale, San Jose Scale, Twig borers | 1 lb. + 2 to 3 gals. of dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. | |
| | Aphids, Brown mites (Clover mites), Olive scale crawlers, San Jose scale crawlers, Two-spotted spider mites | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as infestations occur. Repeat application after 7 days, if necessary. | |
| | Parlatoria scale, Peach twig borers | 1 lb. + 1 gal. light medium Summer horticultural oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply at petal fall. Do not apply more than 4 lbs. of product or 4 gals. of Summer oil per acre. | |
| | Olive scale crawlers | ½ lb. + 1½ gals. light medium horticultural oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Do not apply more than 4 lbs. of product or 4 gals. of Summer oil per acre per application. Allow 7 days between applications. | |
| | Oriental fruitmoths | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply at 100% petal fall. Make 2 additional applications at 10 to 15-day intervals. Time the last application to peak adult flight. | |
| Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. | | |
| Peaches | Apple aphid eggs, Apricot scale, Black cherry aphid eggs, Black scale, Brown mite eggs, Brown scale, European red mite eggs, Mealybugs, Mealy plum aphid eggs, Parlatoria scale, San Jose scale, Twig borers | 1 lb. + 2 to 3 gals. dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. | |
| | Aphids, Brown mites (Clover mites), Olive scale crawlers, San Jose scale crawlers, Two-spotted spider mites | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as infestations occur. Repeat application after 14 days, if necessary. | |
| | Parlatoria scale, Peach twig borer | 1 lb. + 1 gal. light medium Summer horticultural oil in 100 gals. of water |
| TIMING/SPECIAL DIRECTIONS: Apply at petal fall. Do not apply more than 4 lbs. of product or 4 gals. of oil per acre. | | |
| (Continued) | | |

| Fruit and Nut Crop | Pests Controlled | Rate |
|---|---|---|
| Peaches (Continued) | Olive scale crawlers | ½ lb. + 1½ gals. light medium horticultural oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Do not apply more than 4 lbs. of product or 4 gals. of Summer oil per acre per application. Allow 7 days between applications. | |
| | Oriental fruit moths | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply at 100% petal fall. Make 2 additional applications at 10 to 15-day intervals. Time the last application to peak adult flight. | |
| | Peach twig borers | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur in May and June. Allow 7 days between applications. | |
| | Leafhoppers | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 to 4 applications, beginning at petal fall and continuing through the growing season. Allow at least 7 days between applications. | |
| | White peach scale | 1½ to 2 lbs. in 100 gals. of water |
| TIMING/SPECIAL DIRECTIONS: 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. | | |
| Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. | | |
| Pears | Apple aphid eggs, Apricot scale, Black cherry aphid eggs, Black scale, Brown mite eggs, Brown scale, European red mite eggs, Mealybugs, Mealy plum aphid eggs, pear leaf blister mite eggs, Parlatoria scale, San Jose scale, Twig borers | 1 lb. + 2 to 3 gals. dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. | |
| | Pear psylla | ¼ to 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a cover spray at pre-pink stage. Make 1 to 2 additional applications during the first and second cover sprays, if necessary. Allow at least 14 days between applications. | |
| | Mealybugs, Tentiform leafminers | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 cover sprays, beginning in April. Allow at least 14 days between applications. | |
| | Codling moths, Green apple aphids, Rosy apple aphids, Spider mites, Woolly apple aphids | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 cover sprays, beginning as infestations occur. Allow at least 14 days between applications. Note: Mites will be suppressed if this product is used in this regular cover spray program. | |
| | Apple maggots | 1 lb. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Make 3 cover sprays when flies are active and laying eggs. Allow at least 14 days between applications. Note: This product will not control organophosphate-resistant Apple maggot. | |
| Forbes scale crawlers, San Jose scale crawlers | 1 lb. in 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply early in the season when crawlers first appear. If infestation warrants, make a second application 14 days later. | | |
| Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. | | |

| Fruit and Nut Crop | Pests Controlled | Rate | |
|--|--|--|---|
| Pineapple | Pineapple mealybugs | 2 lbs. per acre in 200 to 500 gals. of water | |
| | TIMING/SPECIAL DIRECTIONS: Repeat application as necessary every 28 days, up to a maximum of 8 applications. Do not apply within 7 days of harvest or illegal residues may occur. | | |
| Plums | Apple aphid eggs, Apricot scale, Black cherry aphid eggs, Black scale, Brown mite eggs, Brown scale, European red mite eggs, Mealybugs, Mealy plum aphid eggs, Parlatoria scale, San Jose scale, Twig borers | 1 lb. + 2 to 3 gals. dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water | |
| | TIMING/SPECIAL DIRECTIONS: Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. If applied in late April or May, mix this product with 1 gal. of light medium Summer horticultural oil per 100 gals. of water. | | |
| | Brown mites, Clover mites, European red mites | 1 lb. in 100 gals. of water | |
| | TIMING/SPECIAL DIRECTIONS: Apply as needed, every 7 days. | | |
| | Leafcurl plum aphids, Mealy plum aphids, Thistle aphids | ¼ to 1 lb. in 100 gals. of water | |
| | TIMING/SPECIAL DIRECTIONS: Apply as needed, every 7 days. | | |
| | Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest. | | |
| | Prunes | Apple aphid eggs, Apricot scale, Black sherry aphid eggs, Black scale, Brown mite eggs, Brown scale, European red mite eggs, Mealybugs, mealy plum aphid eggs, Parlatoria scale, San Jose scale, Twig borers | 1 lb. + 2 to 3 gals. dormant oil OR 1 to 1½ gals. superior type oil in 100 gals. of water |
| TIMING/SPECIAL DIRECTIONS: Apply as a dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. For late April or May applications, mix this product with 1 gal. of light medium Summer horticultural oil per 100 gals. of water. | | | |
| Brown mites, Clover mites, European red mites | | 1 lb. in 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply as needed, every 7 days. | | | |
| Leafcurl plum aphids, Mealy plum aphids, Thistle aphids | | ¼ to 1 lb. in 100 gals. of water | |
| TIMING/SPECIAL DIRECTIONS: Apply as needed, every 7 days. | | | |
| Notes: (1) Do not apply more than 4 lbs. of product per acre per application and no more than 12 lbs. 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 lb. in 100 gals. of water per acre | |
| | TIMING/SPECIAL DIRECTIONS: Apply as pests occur. Repeat application if necessary, after 7 days. | | |
| | Cyclamen mites | 2 lbs. in 100 gals. of water per acre | |
| | TIMING/SPECIAL DIRECTIONS: Direct spray to the plant crowns. Plants should be sufficiently agitated to assure thorough coverage of foliage. Repeat application after 7 days, if necessary. | | |
| | Mole crickets | 2 lbs. per acre | |
| | TIMING/SPECIAL DIRECTIONS: Apply 1 to 2 days before transplanting and immediately incorporate into the top 1 to 2 inches of soil. | | |
| | Strawberry leafrollers | ¼ to 1 lb. in 100 gals. of water | |
| | TIMING/SPECIAL DIRECTIONS: Apply 200 gals. of spray per acre when blossoms show color. | | |
| Notes: (1) Do not make more than 3 foliar applications per season. (2) Do not apply more than 2 lbs. of product per acre per application and no more than 8 lbs. of product per acre per season. (3) Allow a minimum of 5 days between the last application and harvest. | | | |

| Fruit and Nut Crop | Pests Controlled | Rate |
|--------------------|---|---------------------------------------|
| Walnuts (CA Only) | Aphids, Spider mites | 2 lbs. in 100 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: Apply as a foliar spray as needed. Repeat application in 14 days, if necessary. Do not make more than 3 applications per season. Do not apply within 45 days of harvest or after husks open or illegal residues may occur. | |
| | Codling moths, Scale crawlers, Walnut caterpillars | 6 lbs. in 100 gals. of water per acre |
| | TIMING/SPECIAL DIRECTIONS: Apply as a foliar spray as needed. Repeat application in 14 days, if necessary. Do not make more than 3 applications per season. Do not apply within 45 days of harvest or after husks open or illegal residues may occur. | |

VEGETABLE CROPS

REI — 24 Hours.

For foliar or soil applications, this product should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. This product 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 Gals. per Acre | - OR - Minimum Gals. per 1,000 Sq. Ft. | Minimum Gals. per Acre |
| Beans (Lima, Pole, Snap), Beets, Red (Table), Broccoli, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Collards, Endive (Escarole), Kale, Lettuce (Head, Leaf), Mustard, Onions (Bulb, Green), Parsley, Parsnips, Peas (succulent only), Peppers, Potatoes (Irish)*, Radishes, Spinach, Swiss Chard, Tomatoes, Turnips | 10 | 2 | 5 |
| Cantaloupes, Casabas, Crenshaws, Cucumbers, Honeydew Melons, Muskmelons, Persian Melons, Squash (Summer, Winter), Watermelons | 5 | 1 | 5 |
| Sweet Corn | 20 | 4 | 5 |

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

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

| Pre-Harvest Intervals (PHI)* for Foliar Applications | |
|---|------|
| Crop | PHI* |
| Beans (Lima, Pole, Snap), Broccoli, Brussels Sprouts, Cauliflower, Cucumbers, Peas, Squash (Summer), Sweet Corn | 7 |
| Beets, Red (Table), Carrots, Endive (Escarole), Lettuce (Head, Leaf), Onions (Bulb, Green), Parsnips, Radishes, Spinach, Swiss Chard, Turnips (Roots, Tops) | 14 |
| Cabbage | 21 |
| Cantaloupes, Casabas, Crenshaws, Honeydew Melons, Muskmelons, Persian Melons, Squash (Winter), Watermelons | 3 |
| Collards, Kale, Mustard | 10 |
| Peppers | 5 |
| Potatoes (Irish) | 35 |
| Tomatoes | 1 |

*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 to 3 inches, for Subterranean cutworms, incorporate 3 to 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 Crop | Pests Controlled | Rate |
|---|--|---|
| Beans (Lima, Pole, Snap - Succulent Only) | Cutworms | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Wireworms | 6 to 8 lbs. per acre OR 2 1/4 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Black bean aphids, Dipterous leafminers, Mexican bean beetle | 1 to 1 1/2 lbs. per acre OR 1/2 to 3/4 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: 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. Bean forage or bean hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if forage is to be cut for hay. Note: This product will not control organophosphate-resistant leafminers. | |
| | Cucumber beetles | 1/2 to 3/4 lb. per acre OR 1/4 to 3/8 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: 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. Bean forage or bean hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if forage is to be cut for hay. Make Cucumber beetle application in 100 gals. of water per acre. Note: This product will not control organophosphate-resistant leafminers. | |
| | Leathoppers, Spider mites | 1 lb. per acre OR 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as pests occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season. Do not apply within 7 days of harvest or illegal residues may occur. Bean forage or bean hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if forage is to be cut for hay. | |
| Beets, Red (Table) | Cutworms | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2 1/4 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Dipterous leafminers | 1/2 to 1 lb. per acre OR 1/4 to 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 14 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant leafminers. | |

| Vegetable Crop | Pests Controlled | Rate |
|--|---|---|
| Broccoli | Root maggots | 4 to 6 lbs. per acre OR 1½ to 2¼ ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting or transplanting and immediately incorporate into the top 3 to 4 inches of soil. | |
| | Root maggots | 4 to 8 ozs. in 50 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: In transplant water as a drench application when 200 to 300 gals. of water are used per acre. Apply ¼ to 1 cup (4 to 8 ozs.) 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 | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| Brussels Sprouts | Aphids, Diamondback moths, Dipterous leafminers, Imported cabbageworms | ¼ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 7 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |
| | Root maggots | 4 to 6 lbs. per acre OR 1½ to 2¼ ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting or transplanting and immediately incorporate into the top 3 to 4 inches of soil. | |
| | Root maggots | 4 to 8 ozs. in 50 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: In transplant water as a drench application when 200 to 300 gals. are used per acre. Apply ¼ to 1 cup (4 to 8 ozs.) 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 | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 oz. per 1,000 sq. ft. | |
| TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | | |
| Aphids, Diamondback moths, Imported cabbageworms | ¼ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. | |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 7 days of harvest or illegal residues may occur. | | |

| Vegetable Crop | Pests Controlled | Rate |
|--|---|---|
| Cabbage | Root maggots | 4 to 6 lbs. per acre OR 1½ to 2¼ ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting or transplanting and immediately incorporate into the top 3 to 4 inches of soil. | |
| | Root maggots | 4 to 8 ozs. in 50 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: In transplant water as a drench application when 200 to 300 gals. of water are used per acre. Apply ¼ to 1 cup (4 to 8 ozs.) 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 | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| Carrots | Aphids, Diamondback moths, Dipterous leafminers, Imported Cabbageworms | ¼ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 21 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |
| | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Carrot rust fly | 4 lbs. per acre OR 1½ ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as a drench to the seed furrow at planting. | |
| Cauliflower | Aphids | 1 lb. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 14 days of harvest or illegal residues may occur. | |
| | Root maggots | 4 to 6 lbs. per acre OR 1½ to 2¼ ozs. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Broadcast just before planting or transplanting and immediately incorporate into the top 3 to 4 inches of soil. | | |

(Continued)

| Vegetable Crop | Pests Controlled | Rate |
|--|---|---|
| <i>(Continued)</i> Cauliflower | Root maggots | 4 to 8 ozs. in 50 gals. of water |
| | TIMING/SPECIAL DIRECTIONS: In transplant water as a drench application when 200 to 300 gals. of water are used per acre. Apply 1/2 to 1 cup (4 to 8 ozs.) 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 | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2 1/4 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Diamondback moths, Dipterous leafminers, Imported cabbageworms | 1/2 to 1 lb. per acre OR 1/4 to 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 7 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |
| Collards | Cutworms | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Aphids, Corn earworms, Diamondback moths, Harlequin cabbagebugs, Imported cabbageworms | 1/2 to 1 lb. per acre OR 1/4 to 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 10 days of harvest or illegal residues may occur. | |
| | Wireworms | 6-8 lbs. per acre OR 2 1/4 to 3 ozs. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. | | |
| Cucumbers | Cutworms | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| <i>(Continued)</i> | | |

| Vegetable Crop | Pests Controlled | Rate |
|---|---|---|
| Cucumbers <i>(Continued)</i> | Wireworms | 6 to 8 lbs. per acre OR 2 1/4 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Melonworms, Thrips, Serpentine leafminers, Cucumber beetles | 1 lb. per acre OR 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: 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: This product will not control organophosphate-resistant Leafminers. | |
| Endive (Escarole) | Cutworms | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2 1/4 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate 4 to 8 inches into soil. | |
| | Aphids, Dipterous leafminers | 1/2 to 1 lb. per acre OR 1/4 to 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 14 days of harvest. Note: This product will not control organophosphate-resistant Leafminers. | |
| Kale | Cutworms | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR 1/2 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2 1/4 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| Aphids, Corn earworms, Diamondback moths, Harlequin cabbagebugs, Imported cabbageworms | 1/2 to 1 lb. per acre OR 1/4 to 1/2 oz. per 1,000 sq. ft. | |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, a minimum of 7 days between applications. Do not apply within 10 days of harvest or illegal residues may occur. | | |
| Lettuce (Head, Leaf) | Cutworms | 4 to 8 lbs. per acre OR 1 1/2 to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| <i>(Continued)</i> | | |

| Vegetable Crop | Pests Controlled | Rate |
|--|--|--|
| <i>(Continued)</i> Lettuce (Head, Leaf) | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Dipterous leafminers | ½ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 14 days of harvest. Note: This product will not control organophosphate-resistant Leafminers. | | |
| Melons (Cantaloupes, Casabas, Crenshaws, Honeydew, Muskmelons, Persians, and Hybrids of these) and Watermelons | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Dipterous leafminers, Leafhoppers, Melonworms, Spider mites, Striped cucumber beetles, Thrips | ½ to 1½ lbs. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary every 7 days. Do not make more than 5 applications per season. Do not apply within 3 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | | |
| Onions (Bulb, Green) | Onion maggots | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and mix into the top 3 to 4 inches of soil. (See "Soil Incorporation Note".) Note: This product will not control organophosphate-resistant Onion maggots. | |
| | Onion thrips | 1 lb. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as Thrips appear. Repeat after 7 days, if necessary. Do not make more than 3 applications per season. Do not apply within 14 days of harvest or illegal residues may occur. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |

| Vegetable Crop | Pests Controlled | Rate |
|---|---|--|
| Parsley | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| Parsnips | Aphids, Dipterous leafminers, Flea beetles | ½ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 14 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |
| Peas (Succulent Only) | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL INSTRUCTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Aphids, Dipterous leafminers | ¼ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, every 5 days. Do not make more than 3 applications per season. To avoid illegal residues, allow a minimum of 7 days between the last application and harvest. Vines and hay may be fed to dairy and beef cattle and sheep. To avoid illegal residues, wait 7 days following treatment if forage is to be cut for hay. Note: This product will not control organophosphate-resistant Leafminers. | | |
| Peppers | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Serpentine leafminers | ¼ lb. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within 5 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |

| Vegetable Crop | Pests Controlled | Rate |
|---|---|--|
| Potatoes | Cutworms (Surface, Subterranean) | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Southern potato wireworms (Southeastern U.S.) | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: For Potatoes grown on mineral soils in the Southeast, apply prior to planting and immediately incorporate into the top 3 to 6 inches of soil, depending on location of Wireworms. | |
| | Aphids, Potato beetles, Dipterous leafminers, Flea beetles | ½ to ¾ lb. per acre OR ¼ to ⅜ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 35 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |
| | Banded cucumber beetles, Leafhoppers, Southern armyworms | ¼ to 1 lb. per acre OR ⅞ to ½ oz. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 35 days of harvest or illegal residues may occur. | | |
| Note: Do not use on commercially grown potatoes which will be hand-harvested. | | |
| Radishes | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Dipterous leafminer, Flea beetles | ½ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 3 times, with a minimum of 7 days between applications. Do not apply within 14 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | | |
| Spinach | Aphids, Dipterous leafminers | ½ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 14 days of harvest. Note: This product will not control organophosphate-resistant Leafminers. | |
| Squash, Summer | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| (Continued) | | |

| Vegetable Crop | Pests Controlled | Rate |
|---|---|--|
| Squash, Summer (Continued) | Aphids, Leafhoppers, Leafminers, Melonworms, Spider mites, Striped cucumber beetles, Thrips | ½ to 1½ lbs. per acre OR ¼ to ¾ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: 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: This product will not control organophosphate-resistant Leafminers. | |
| Squash, Winter | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Leafhoppers, Leafminers, Melonworms, Spider mites, Striped cucumber beetles, Thrips | ½ to 1½ lbs. per acre OR ¼ to ¾ oz. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 3 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | | |
| Sweet Corn | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Seed corn maggots | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2¼ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Corn earworms | 2 to 2½ lbs. per acre OR ¼ to 1 oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply when silks first appear. Repeat application every 7 days, up to a maximum of 5 applications, if necessary. | |
| | Corn leaf aphids | 1 to 2 lbs. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: 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. | |
| Flea beetles, Grasshoppers, Spider mites | 1 lb. per acre OR ¼ oz. per 1,000 sq. ft. | |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat if necessary, but do not make more than 5 applications per season. | | |
| Sap beetles | 2 to 2½ lbs. per acre OR ¼ to 1 oz. per 1,000 sq. ft. | |
| TIMING/SPECIAL DIRECTIONS: Consult Local Agricultural Authorities for proper timing of application. Repeat application in 7 days, if necessary. Do not make more than 5 applications per season. | | |
| Notes: (1) To protect bees, do not apply foliarly to corn during the pollen shed period. (2) Allow a minimum of 7 days between the last application and grazing or cutting for forage. (3) Corn may be picked 7 days after the last application. | | |

| Vegetable Crop | Pests Controlled | Rate |
|---|---|--|
| Sweet Potatoes | Flea beetles, Wireworms | 6 to 8 lbs. per acre OR 2½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| Swiss Chard | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Wireworms | 6 to 8 lbs. per acre OR 2½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Corn earworms, Diamond-back moths, Harlequin cabbagebugs, Imported cabbageworms | ½ to 1 lb. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 14 days of harvest or illegal residues may occur. | |
| Tomatoes | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast one to two days before planting and immediately incorporate into the top 1 to 2 inches of soil. | |
| | Wireworms | 6 to 8 lbs. per acre OR 2½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Dipterous leafminers | 2 lb. per acre OR ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within 1 day of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |
| | Banded cucumber beetles, Beet armyworms, Fall armyworms, Southern armyworms | ¼ to 1 lb. per acre OR ⅜ to ½ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within 1 day of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | |
| Vinegar flies | ½ to 1½ lbs. per acre OR ¼ to ½ oz. per 1,000 sq. ft. | |
| TIMING/SPECIAL DIRECTIONS: Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within 1 day of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | | |
| Turnips (Roots, Tops) | Cutworms | 4 to 8 lbs. per acre OR 1½ to 3 ozs. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the soil. (See "Soil Incorporation Note".) | |
| | Mole crickets | 2 lbs. per acre OR ¼ oz. per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: One to two days before planting, broadcast and immediately incorporate into the top 1 to 2 inches of soil. | |

| Vegetable Crop | Pests Controlled | Rate |
|--|---|--|
| Turnips (Roots, Tops) (Continued) | Wireworms | 6 to 8 lbs. per acre per 1,000 sq. ft. |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 8 inches of soil. | |
| | Aphids, Dipterous leafminers, Flea beetles | ½ to 1 lbs. per acre OR ¼ to ½ oz. per 1,000 sq. ft. |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days between applications. Do not apply within 14 days of harvest or illegal residues may occur. Note: This product will not control organophosphate-resistant Leafminers. | | |

MUSHROOM HOUSES

Mushroom flies (Phorids and Sciarids)—Mix 4 to 5 pounds of this product in 50 gallons of water and spray on outside and inside walls, floors and sideboards of mushroom houses after compost has been pasteurized by heating. Also spray over the plastic covering the beds and trays after spawning. **Note:** Do not spray the compost. To avoid illegal residues, do not apply more than 3 applications to mushroom houses per crop.

SEED TREATMENT — PLANTER BOX TREATMENT

In the planter box, mix with seed as a dry mixture. Stir slightly, using a mixing stick. **DO NOT MIX WITH BARE HANDS.** Treat only those seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seed beyond planting time. Exposed treated seeds may be hazardous to birds and other wildlife. Dispose of excess treated seed by burial away from bodies of water.
Notes: (1) If seed has not been treated with a fungicide, use an EPA-registered fungicide in combination with this product at rates indicated on the fungicide package. Failure to use a fungicide may result in injury to the seed. (2) If the seed treatment increases the friction between seeds sufficiently to reduce the rate of delivery through the planter, ½ ounce of graphite per bushel seed should be added as a drill lubricant. Adjust the planter to give the required rate of seed delivery with the treated seed. (3) Treated seed must not be used or mixed with food or animal feed or processed for oil.

CORN—Seedcorn beetle: Mix 3 ounces per bushel of seed.

CORN, SUCCULENT PEAS, SUCCULENT BEANS—Seedcorn maggot: Mix ½ ounce per bushel of seed.

FIELD CROPS

REI — 24 Hours.

Apply soil and foliar applications of DIAZINON 50 WP 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.

| Field Crop | Pests Controlled | Rate |
|---|---|----------------------|
| Hops | Aphids, Spider mites | 2 lbs. per acre |
| | TIMING/SPECIAL DIRECTIONS: Apply as pests occur. Repeat applications, if necessary, in 14 days. Do not make more than 4 applications per season or apply within 14 days of harvest or illegal residues may occur. | |
| Sugar Beets | Wireworms | 6 to 8 lbs. per acre |
| | TIMING/SPECIAL DIRECTIONS: Broadcast just before planting and immediately incorporate into the top 4 to 6 inches of soil. Do not apply more than 8 lbs. of this product to the soil per season. | |
| | Aphids, Beet leathoppers, Dipterous Leafminers | ¼ to 1 lb. per acre |
| TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times per season, with a minimum of 7 days between applications. Do not apply within 14 days of harvest. Note: This product will not control organophosphate-resistant Leafminers. | | |

(Continued)

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| Field Crop | Pests Controlled | Rate |
|---|---|----------------|
| Sugar Beets (Continued) | Grasshoppers | 1 lb. per acre |
| | TIMING/SPECIAL DIRECTIONS: Apply as insects occur. Repeat application, as necessary, up to 5 times per season, with a minimum of 7 days between applications. Do not apply within 14 days of harvest. | |
| Note: Sugar beet tops may be fed to beef and dairy animals. | | |

GRASSLAND INSECTS

Ditchbanks, Roadsides, Wasteland, Non-crop Areas, Barrier Strips—
Grasshoppers: Apply ¾ to 1 pound per acre in sufficient water or oil to obtain thorough coverage when insects first appear, preferably in the nymphal stage.

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

LIVESTOCK INSECTS

Sheep *Ticks (Keds), Lice

High gallonage, high pressure spray: Mix ½ pound in 100 gallons of water and apply at the rate of 1 gallon per animal.

Low gallonage, low pressure spray: Mix 1 pound in 100 gallons of water. Apply at the rate of 1 quart per animal.

Sprinkler Can: Mix 1 ounce in 6 gallons of water. Crowd sheep into a small pen and sprinkle 1 quart of this mixture over the head, neck, top and side of each sheep. Stir or agitate mixture frequently.

Note: Do not slaughter sheep within 14 days after treatment. Repeat applications as necessary.

FLY CONTROL IN LIVESTOCK STRUCTURES

Fly control in barns and animal sleeping quarters (except dairy barns, milk rooms and poultry houses).

Residual Sprays: Remove animals from buildings or corrals prior to treatment and keep animals out for at least 4 hours. Mix 2 pounds of this product in 25 gallons of water and apply as an overall spray to ceilings and walls of livestock sheds, calf barns, hog barns, loafing sheds and other farm buildings, except poultry houses, dairy barns and milk rooms. Areas where flies congregate, such as garbage dumps and corrals, should be sprayed thoroughly. Longer residual control may be obtained by increasing the rate to 4 pounds in 25 gallons of water. Applications should be made to point of runoff. One (1) gallon of the above spray should cover from 350 to 750 square feet of area, depending on the surface treated. Repeat applications as fly populations warrant.

Bait Sprays: Mix the appropriate amount of this product with 1 pound of sugar (or 2 cups of syrup or molasses) for the desired application.

For **knapsack or similar type sprayer**, mix ½ pound with the sugar in 2½ gallons of water and spot treat areas frequented by flies, including cracks, crevices, doorways, around windows or other areas where flies congregate. Repeat applications as fly populations warrant.

For **sprinkling can application**, mix 2 ounces with the sugar in 5 gallons of water and sprinkle lightly over the floor in areas frequented by flies. Applications every day or two will generally be required.

Do not contaminate milk, feed, drinking water or apply to animals or poultry. Do not use in edible product areas of food processing plants or other areas where food is commercially prepared or processed. Do not use in dwellings.

INSECT CONTROL ON ORNAMENTALS

REI — 12 Hours.

To control certain insects on ornamentals, such as 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, was plant (hoya), willow, yellowwood and yew, apply the recommended rates indicated below. Try to spray underside of leaves and penetrate dense foliage. Repeat as necessary.

Mimosa webworms: Mix ½ ounce in 3 gallons of water (or 1 pound in 100 gallons of water) and apply as a thorough foliar spray when adults first appear. Make a second and third application at 4 to 5 week intervals.

| Insects | Amount of This Product | |
|---|--|--------------------------|
| | Rate per 3 Gals. Water | Rate per 100 Gals. Water |
| Aphids, Bagworms, Carnation bud mites, Carnation shoot mites, Clover mites, Cyclamen mites, Dipterous leafminers, European pine shoot moths, European red mites, Flea beetles, Holly bud moths, Juniper webworms, Leafhoppers, Obscure root weevils, Omnivorous leafhoppers, Privet mites, Scale crawlers (Cottony-cushion), Lecanium, Pine needle, San Jose, Soft), Thrips, Two-spotted spider mites, Juniper webworms, Whiteflies | ½ oz. | 1 lb. |
| Apple-and-Thorn skeletonizers, Cotoneaster webworms, European pine sawfly, Fall webworms, Hemlock chermes, Oak loopers, Obliquebanded leafrollers, Pear slugs, Tent caterpillars | ½ ¼ | 3 lbs. |
| | Note: Do not use on Ferns, Gardenia, Hibiscus, Papaya, Pilea and Poinsettia, since injury to the plants may occur. | |

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, NY 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 (ducks or geese) can be expected to enter treated area after treatment (except spot treatments), water lawn with at least ¼ inch of water immediately after application; however, stop irrigation before puddling occurs. To control pests listed below, apply specified rates.

| Insects | Rate per 1,000 sq. ft. | |
|--|--|---------|
| | This Product | Water |
| Lawn chinch bugs | 2 to 3 ozs. | 3 gals. |
| | REMARKS: Use higher rate for longer residual control and in turfgrass of dense growth, such as St. Augustine. | |
| Ants, Armyworms, Bermuda-grass mites, Clover mites, Springtails (Collembola), Crickets, Cutworms, Digger wasps, Earwigs, Frit flies, Lawn billbugs, Leafhoppers, Sod Webworms (Lawn moths), Sowbugs (Pillbugs), Brown dog ticks, Chiggers, Fleas | 3 ozs. | 3 gals. |
| | REMARKS: Spot spray ant hills and wasp ground nest openings. For Digger wasps, apply product at dusk with wasps are not active. For Frit flies, mow grass and water well before treatment, but delay application until grass is dry. For Brown dog ticks, spray grass and under shrubbery. Note: Do not apply to animals. | |
| Hyperodes weevils | 3 ozs. | 3 gals. |
| | REMARKS: Treat problem areas in mid-April and again in mid-May. | |
| Millipedes | 3 ozs. | 3 gals. |
| Rhodesgrass scales | 3 ozs. | 3 gals. |
| | REMARKS: Apply when crawlers first emerge. | |
| White grubs (European chafer, Japanese beetle larvae, Southern chafer) | 3 ozs. | 3 gals. |
| | REMARKS: Apply any time between late July and early October. | |

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NUISANCE PESTS IN OUTSIDE AREAS

| Pests | Rate per 1,000 sq. ft. | |
|---|---|---------|
| | This Product | Water |
| Ants, Boxelder bugs, Brown dog ticks, Chiggers, Clover mites, Cockroaches, Crickets, Earwigs, Fleas, Flies, Millipedes, Sowbugs (Pillbugs), Spiders, Springtails (Collembola) | 3 ozs. | 3 gals. |
| | REMARKS: 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 these pests from entering the house, spray a 5-ft. band of ground around the house next to the foundation and spray the foundation of the house to a height of 2 to 3 ft. Repeat application as necessary. | |
| Note: Do not apply to animals. Do not apply to plants (except tree trunks as noted above) at this nuisance pest rate. | | |
| Fire ants | 2 teaspoons | None |
| | REMARKS: Evenly apply this product in its dry, undiluted state over each fire ant mound. | |
| | 1 oz. | 5 gals. |
| | REMARKS: Apply 1 gal. of solution to each mound by sprinkling the mound and the immediate surrounding area until wet. Apply gently to avoid distributing ants. | |
| Note: For best results, apply in cool weather (60°-80°F), or in the early morning or late afternoon when the ants are most active. Treat new mounds as they appear. | | |

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. Open dumping is prohibited.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. To avoid harming aquatic organisms in rivers and other surface waters, do not pour spray mixture or rinse water into sanitary drains (for example; toilets, floor drains and sinks) or into storm water sewers (for example; street drains). 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 DISPOSAL: Completely empty bag into application equipment. Then, dispose of empty bag in a sanitary landfill or by incineration or, if allowed by State and Local authorities, by burning. 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.

WARRANTY—CONDITION OF SALE

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.