

Reg # 829-249

PM-15

380698

1 of 13

AUG 23 1990

Mr. Ronald Costa Rica  
Southern Agricultural Insecticides, Inc.  
P.O. Box 218  
Palmetto, FL 34220

Subject: Amendments - Revise per Diazinon Registration Standard  
and the Agency's May 1, 1990 Data Call-In letter  
to reflect only those uses supported by Ciba-Geigy  
SA-50 Brand Home and Garden Diazinon 25% Spray Concentrate  
EPA Reg. N. 829-249  
Your submission dated June 7, 1990

Dear Mr. Costa Rica:

The amendments referred to above, submitted in connection with a registration under the Federal Insecticide, Fungicide, and Rodenticide Act, are acceptable provided the following revisions are made prior to release for shipment under the amended labeling:

FOR THE CONTAINER LABEL:

- 1) Revise ACTIVE INGREDIENTS to ACTIVE INGREDIENT, since there is only one.
- 2) In the STORAGE section of the STORAGE AND DISPOSAL directions, add:  
Use contents within 6 months after opening.

[NOTE: This should appear as underlined, bold print, or italicized.]

FOR THE BOOKLET LABEL:

- 1) In the GENERAL INFORMATION text, add as the first of the "Notes"  
Use contents within 6 months after opening.

[NOTE: This should appear as underlined, bold print, or italicized.]

2) Add as the 6th of the "Notes" in the GENERAL INFORMATION text:

(6) Do not apply to food crops grown in greenhouses.

3) In the "Insects" column for the site "Trees & Shrubs", correct the spelling of "Euonymus" in the "Scale Crawlers" listing.

4) In the directions for "Roses & Flowers", correct the spelling of "Euonymus Scale" in the "Insects" column.

5) For caneberry crops, in the column "Cron", revise the first lines to read: "Caneberries (CA, OR, WA only): ". Also, in the "Pest" column for these crops, revise "Twospotted Mites" to "Twospotted Spider Mites".

6) For the crop "Strawberries", in the "Pest" column, revise "Twospotted Mites" to "Twospotted Spider Mites".

7) In the second introductory paragraph under the heading "Vegetable Crops" ("Observe stated time ...") add "Do not apply to food crops grown in greenhouses."

8) For the crop "Beans", in the "Pest" column, revise "Mites" to "Twospotted Spider Mites".

A stamped copy of the label is enclosed for your records. Please submit five (5) copies of the revised amended label prior to release for shipment under the amended label. NOTE: When preparing your label, do not print the quotation marks that appear around revised text items specified in this letter.

Please refer to the Diazinon Registration Standard, as amended, for release for shipment and channels of trade dates for diazinon products bearing appropriately amended labels.

Sincerely yours,

George T. LaRocca  
Product Manager (15)  
Insecticide-Rodenticide Branch  
Registration Division (H7505C)

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
WARNING**

May be fatal if swallowed or absorbed through skin. Avoid breathing spray mist. Causes substantial but temporary eye damage. Do not get into eyes, on skin or clothing. Wear goggles or safety glasses. Avoid contact with eyes and skin. Wash thoroughly if on skin and after handling. Do not use in home. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans. Do not permit children or pets to go onto treated area, such as grass or soil, until the spray has dried. Do not contaminate ornamental fish ponds. Food utensils such as spoons and measuring cups must not be used for food purposes after use in measuring pesticides.

**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 certain Anatic 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. Application rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping of sprays. Where irrigation (watering) is recommended in the directions, or if waterfowl, i.e., ducks or geese, can be expected in the treated area after treatment (except spot treatment), apply a minimum of 1/4 inch of water immediately after applying this product. Stop irrigation before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). 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. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use, pour, spill, or store near heat or open flame.

*Home & Garden*  
**DIAZINON®  
INSECTICIDE**  
25% Spray Concentrate  
**THIS PRODUCT MUST NOT BE USED ON  
GOLF COURSES AND SOD FARMS.**

KILLS CERTAIN outdoor insects which destroy vegetables, turf, roses, flowers, trees and shrubs or annoy pets and people. Contains Diazinon insecticide which provides positive control of many hard to kill sucking and chewing insects.

<b>ACTIVE INGREDIENTS</b>	
Diazinon (0,0-dimethyl 0-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate)	25.0%
<b>INERT INGREDIENTS*</b>	75.0%
*Contains Xylene Range Aromatic Solvent	
Contains 2 lbs. Diazinon per gallon	<b>TOTAL: 100.0%</b>

**KEEP OUT OF REACH OF CHILDREN  
WARNING:**

**STATEMENT OF PRACTICAL TREATMENT**

**IF SWALLOWED:** Call a physician immediately. DO NOT INDUCE VOMITING UNLESS NO OTHER TREATMENT IS AVAILABLE. Vomiting may cause aspiration pneumonia. If it is necessary to induce vomiting, give victim one or two glasses of water and insert finger in back of throat. Do not induce vomiting or give anything by mouth if person is unconscious or comatose.  
**IF INHALED:** Remove victim to fresh air and apply respiration if indicated.  
**IF ON SKIN:** Wash promptly with soap and water. Rinse thoroughly.  
**IF IN EYES:** Rinse eyes with plenty of water and call a physician immediately.  
**NOTE TO PHYSICIAN:** This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidote. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. This product contains a xylene range aromatic solvent which may present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

EPA EST NO 829-FL-1 (3), 829-NC-1 (4), 829-NC-2 (5) Number following Est. No. Corresponds to first digit in Lot. No. on side label.

**Southern Agricultural Insecticides, Inc.**  
Palmetto, FL 34220      Hendersonville, NC 28793      Beens, NC 28607  
EPA Reg. No. 829-249      J3      Net Contents Liquid, 1 Quart

ACCEPTED  
with COMMENTS  
in EPA Letter Dated.

AUG 23 1990

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

829-249

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For the directions for  
attached booklet.

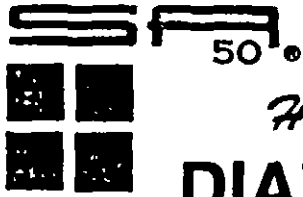
STOR

Do not store near heat o  
in an area inaccessible

Do not reuse empty cont  
wrap it in several layer  
disposal of a partially fu  
is tightly closed, secure  
newspaper and discard



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*Home and Garden*

**DIAZINON  
INSECTICIDE**

**25% Spray Concentrate**

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

**DIRECTIONS  
FOR  
APPLICATION**

**Southern Agricultural Insecticides, Inc.**  
Palmetto, FL 34228    Hendersonville, NC 28753    Boone, NC 28607  
EPA Reg. No. 829-249                                    22

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

AUG 23 1990

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

829-249

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**DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY**

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

**CONDITIONS OF SALE AND WARRANTY**

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

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

**DIRECTIONS FOR USE**

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

**GENERAL INFORMATION**

SA-50 Diazinon 25% Spray Concentrate is an emulsifiable concentrate product which must be diluted with water before application. Refer to the section "How to Mix and Apply". This product kills many outdoor insects which damage lawns, roses, flowers, trees, shrubs, vegetables, fruits, and insects which annoy pets and people. (Refer to label directions in booklet under cap for specific insects controlled and complete directions for use.) Contains diazinon insecticide which provides positive control of many "hard-to-kill" sucking and chewing insects. SA-50 Diazinon 25% Spray Concentrate works fast and applications should be repeated only as directed to maintain control.

Notes: (1) SEE "STORAGE AND DISPOSAL" DIRECTIONS. (2) Do not use in the home. (3) Do not use on ferns, poinsettia, hibiscus, papaya, pine, gardenia or orchids since injury may occur (4) Do not use on commercially grown potatoes which will be hand-harvested. (5) Use this product on succulent peas and beans only. Do not use on dried pea or bean varieties.

Precautions: 1) Wear a long-sleeved shirt and long-legged pants when spraying. 2) Spray with the wind to your back. 3) Do not spray on windy days. 4) If clothing becomes wet from spray during use, remove clothing after spraying, wash affected body areas thoroughly with soap and water, and launder clothing before wearing again.

**HOW TO MIX AND APPLY:**

Step #1: Determine size of spraying job. For lawns and vegetables, measure the area to be sprayed. For all other applications, apply as a thorough cover spray. Make applications when insects first appear. Applications should be repeated only as directed to maintain control.

Step #2: Use clean sprayer. Carefully measure and mix the amount of SA-50 Diazinon 25% Spray Concentrate and water as suggested in the rate chart.

Step #3: Spray as directed in rate chart. Thorough coverage is important. Flush sprayer with clean water after each use.

See chart for complete insect list. Use rates shown unless otherwise indicated.

- 1 tablespoon = 3 teaspoons
- 1 fl. oz. = 6 teaspoons or 2 tablespoons
- 6 fl. oz. = ¾ cup
- 2 tablespoons in 3 gals. of water = 2 teaspoons in 1 gal. of water or 6 oz. in 18 gals. of water

LAWN PEST CONTROL

Use on Bent, Bermuda, Bluegrass, Dactylis, Fescue, Marion and St. Augustine Grass.

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

Pests	Rate		Remarks
	24-50 Diazinon 25% Spray Concentrate	Water	
Lawn Chinch Bugs	1 1/2 table- spoons per 125 sq ft or 6 fl ozs per 1,000 sq ft	3 gals.  24 gals	Thoroughly wet down grass a few hours before applying. In the North, if Chinch Bugs are the only problem, a lower rate of application can be used: 3 table-spoons in 3 gals. of water covers 125 sq ft or 4 fl ozs. in 24 gals. of water per 1,000 sq ft.
Ants, Army-worms, Bermuda Grass Mites, Clover Mites, Springtails (Collembola), Crickets, Cut-worms, Digger Wasps, Earwigs, Fire Flies, Lawn Billbugs, Leaf-hoppers, Sod Webworms (Lawn Moths), Sowbugs (Billbugs)	1 1/2 table- spoons per 125 sq ft or 6 fl ozs per 1,000 sq ft	3 gals.  24 gals	Thoroughly wet down grass a few hours before applying. For ants and digger wasps, spot spray ant hills and wasp ground nest openings. For digger wasps, apply at dusk, when wasps are not active. Billbug control: Apply when activity is first observed or when crickets or lawn grass is present indicating damage from the insect. For fire flies, mow grass and water well before treatment, but delay application until grass is dry.
Brown Dog Ticks, Chiggers, Fleas	1 1/2 table- spoons per 125 sq ft or 6 fl ozs per 1,000 sq ft	3 gals.  24 gals	Note: Do not apply to animals. For brown dog ticks, spray grass and under shrubbery, particularly near house.
Milipedes	1 1/2 table- spoons per 125 sq ft or 6 fl ozs per 1,000 sq ft	3 gals.  24 gals	Thoroughly wet grass a few hours before applying.
Rhodesgrass Scales	1 1/2 table- spoons per 125 sq ft or 6 fl ozs per 1,000 sq ft	3 gals.  24 gals	Apply when crawlers first emerge.
White Grubs of Japanese Beetle, European Chafer, Southern Chafer	1 1/2 table- spoons per 125 sq ft or 6 fl ozs per 1,000 sq ft	3 gals.  24 gals	Water grass thoroughly after application. Grub control. Apply any time between late July and early October.
Hyppodamia Weevil	1 1/2 table- spoons per 125 sq ft or 6 fl ozs per 1,000 sq ft	3 gals.  24 gals	Water grass thoroughly after application. Treat problem areas in mid-April and again in mid-May.

INSECT CONTROL ON TREES, SHRUBS AND FLOWERS

Trees & Shrubs	Insects	Rate per 3 gals. of water	Timing/ Special Directions
Alder, Azalea, Birch, Boxwood, Camellia, Douglas Fir, Elm, Hawthorn, Holly, Juniper, Lilac, Locust, Maple, Mimosa, Oak, Pine, Ornamental Plum, Poplar, Rhododendron, Spruce, Wister	Aphids, Bagworms, European Pine Shoot Moths, Holly Bud Moths, Dipterous Leafminers (Arborvitae, Azalea, Birch, Boxwood, Holly, Oak), Leafhoppers, Mealybugs, Mites (Clover, Cyclamen, European Red, Privet, Two-spotted Spider), Obscure Root Weevils, Omnivorous Leafhoppers, Scale Crawlers, (Cotton-cushion, Erionymus, Lecanium, Pine Needle, Pin Scale, San Jose, Soft)	2 tablespoons	Apply as a thorough foliar spray. Wet leaves and branches to the dropping point. Try to penetrate dense foliage with spray.
	Webworms (Juniper, Mimosa), Whiteflies	2 tablespoons	Apply as a thorough foliar spray. Mimosa Webworms: Apply as a thorough foliar spray when adults first appear. Make two additional applications at 4-5 week intervals.
	Apple and Thorn Skeletonizers, Hemlock Chirps, Oak Looper, Obliquebanded Leafrollers, Pear Slugs, Tent Caterpillars, Webworms (Cottonaster, Fall)	2 tablespoons	Apply as a thorough foliar spray.
<b>Blossoms and Flowers</b>			
Azaleas, Camellias, Chrysanthemums, Carnations, Gladiol, Lilac, Rhododendron, Roses	Aphids, Erionymus Scale Crawlers, Flea Beetles, Dipterous Leafminers, Leafhoppers, Mealybugs, Mites (Carnation Bud, Carnation Shoot, Cyclamen, European Red, Two-spotted Spider), Thrips, Whiteflies	2 tablespoons	Apply as a thorough foliar spray. Try to spray underside of leaves and penetrate dense foliage.

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**Fruits**

Start spraying after blooming. Applications should be made according to insect or when aphids, mites, and crawler stages of scale insects are first noted. Observe stated time intervals between last application and harvest of the crop, as well as intervals between applications and total number of applications that can be made per season.

Crop	PHI*
Apricots	10
Blackberries	7
Boysenberries	7
Cherries	10
Deerberries	7
Grapes	18
Loganberries	7
Nectarines	10
Peaches	20
Plums	10
Prunes	10
Raspberries	7
Strawberries	5

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

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

Crop	Pest	Rate	Timing/Special Directions
Apricots	Aphids, Apricot Mealybugs, Mites (Clover [brown], Two-spotted Spider), Scale Crawlers (Olive, San Jose)	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 6 gallons per 500 sq. ft. of orchard. Do not make more than 5 applications per season a minimum of 14 days apart. Do not apply within 10 days of harvest.
Caneberries (WA, OR, CA only), Blackberries, Boysenberries, Deerberries, Loganberries, Raspberries	Aphids, Leafhoppers, Raspberry Fruitworms, Two-spotted Mites, Thrips	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 6 gallons per 500 sq. ft. of field. Do not make more than 5 applications per season a minimum of 14 days apart. Do not apply within 7 days of harvest.  This product may be used on caneberries only in California, Oregon and Washington. Do not use this product on caneberries grown in other states.
Cherries	Black Cherry, Aphids, Cherry Fruitflies, Cherry Fruitworms (Maggot), Fruitree Leaf-rollers, Mites (Cherry Rust), Scale Crawlers (San Jose)	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 6 gallons per 500 sq. ft. of orchard. Do not make more than 5 applications per season a minimum of 7 days apart. Do not apply within 10 days of harvest.
Grapes	Aphids, Leafhoppers, Grape Berry Moths, Grape Leafhoppers	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 3 gallons per 500 sq. ft. of vineyard. Do not make more than 5 applications per season a minimum of 7 days apart. Do not apply within 10 days of harvest.
Nectarines	Aphids, Mites (Clover [brown], Two-spotted Spider), Scale Crawlers (Olive, San Jose)	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 6 gallons per 500 sq. ft. of orchard. Do not make more than 5 applications per season a minimum of 14 days apart. Do not apply within 10 days of harvest.
Peaches	Aphids, Mites (Clover [brown], Two-spotted Spider), Scale Crawlers (Olive, San Jose)	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 6 gallons per 500 sq. ft. of orchard. Do not make more than 5 applications per season a minimum of 14 days apart. Do not apply within 20 days of harvest.
Plums and Prunes	Aphids (Leaf-curl Plum), Mealy Plum, Triste), Mites (Clover [brown], European Red)	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 6 gallons per 500 sq. ft. of orchard. Do not make more than 5 applications per season a minimum of 7 days apart. Do not apply within 10 days of harvest.
Strawberries	Aphids, Two-spotted Mites, Strawberry Leafrollers	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 3 gallons per 500 sq. ft. of field. Do not make more than 3 applications per season a minimum of 7 days apart. Do not apply within 5 days of harvest.



**VEGETABLE CROPS**

For foliar or soil applications, SA-50 Diazinon 25% Spray Concentrate should be applied in the volumes of water recommended in the table below to assure thorough coverage of the foliage or soil.

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

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

Crop	PHI*
Beans, Lima, Pole & Snap <sup>1</sup>	7
Beets, Red (Table)	14
Broccoli	5
Cabbage	7
Cantaloupe	3
Carrots	10
Casabe	3
Cauliflower	5
Celery	10
Chinese Broccoli	10
Chinese Cabbage	10
Collards	10
Cranberries	3
Cucumbers	7
Endive (Escarole)	10
Moneyew Melons	3
Kale	10
Lettuce	10
Muskmelons	3
Onions, Bulb & Green	10
Parsnips	10
Peas <sup>1</sup>	0
Peppers	5
Potatoes (fresh) <sup>2</sup>	35
Radishes	10
Spinach	7
Squash, summer	7
Squash, winter	3
Sweet Corn	0
Tomatoes	1
Turneps	10
Watermelons	3

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

<sup>1</sup> Do not use this product on dried pea or black-eyed bean varieties such as pinto beans, dried limas, or dried black-eyed peas.

<sup>2</sup> Do not use this product on commercially-grown potatoes which will be hand-harvested.

**VEGETABLE CROPS**

For application to the foliage, thoroughly spray all plant parts. Application to the soil should be mixed into the soil immediately after application.

Crop	Pest	Rate	Timing/Special Directions
Beans, Lima, Pole and Snap (succulent varieties only)	Aphids, Cucumber beetles, Grasshoppers, Leafhoppers, Mexican Bean Beetles, Mites	2 tablespoons in 3 gals of water to cover 1,000 sq ft of garden	Thoroughly spray all plant parts. Repeat application every 5 days up to 3 applications per season. Do not apply within 7 days of harvest.
	Cutworms (surface & subterranean)	6 tablespoons per 500 sq ft in a minimum of 1 1/2 gals of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq ft in a minimum of 1 1/2 gals of water	Broadcast to the soil 1-2 days before planting. Immediately work into soil 1-2 inches.
	Wireworms (snap beans only)	6 tablespoons per 500 sq ft in a minimum of 1 1/2 gals of water	Broadcast to the soil just before planting. Immediately work into soil 4-6 inches.

Note: To protect bees, do not apply bean foliage treatments if the beans or weeds in the treatment area are in bloom.

Beets, Red (Table)	Cutworms (surface & subterranean)	6 tablespoons per 500 sq ft in a minimum of 1 1/2 gals of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq ft in a minimum of 1 1/2 gals of water	Broadcast to the soil 1-2 days before planting. Immediately work into soil 1-2 inches.

Crop	Pest	Rate	Timing/Special Directions
Broccoli	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 5 days of harvest.
Cabbage	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 7 days of harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Root Maggots	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 3-4 inches.

Crop	Pest	Rate	Timing/Special Directions
Cabbage	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 4-8 inches.
Carrots	Aphids, Flea Beetles, Leafhoppers, Diptera, Leafminers, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat applications every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil 1-2 days before planting. Immediately work into soil 1-2 inches.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 4-8 inches.
Cauliflower	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Diptera, Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 5 days of harvest.
Celery	Aphids, Flea Beetles, Leafhoppers, Diptera, Leafminers, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Chinese Broccoli	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Diptera, Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Chinese Cabbage (Bok Choy and Napa)	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Diptera, Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Collards	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Diptera, Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Corn (see sweet corn)			
Cucumbers	Aphids, Thrips, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 7 days of harvest.

Endive (Escalole) Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites Thoroughly spray all plant parts up to 5 applications per season. Do not apply within 10 days of harvest. 11 of 13

Endive (Escalole)	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Endive (Escalole)	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbage-worms, Dipterous Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Lettuce	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Lettuce	Cutworms (Surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
Lettuce	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 4-8 inches.
Melons (Cantaloupes, Casabas, Crenshaws, Honeydews, Muskmelons, Persans and Hybrids of these) and Watermelons	Aphids, Thrips, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 3 days of harvest.
Onions, Green & Bulb	Onion Thrips	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 3 applications per season. Do not apply within 10 days of harvest.
Parsnips	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat applications every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Peas (succulent only)	Aphids, Cucumber Beetles, Grasshoppers, Leafhoppers, Mexican Bean Beetles, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 5 days up to 3 applications per season. Peas may be picked immediately after application.
Peas (succulent only)	Cutworms (Surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
Peas (succulent only)	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil 1-2 days before planting. Immediately work into soil 1-2 inches.
Peas (succulent only)	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 4-8 inches.

Notes: 1) Do not apply this product to dried pea varieties such as split peas. 2) To protect bees, do not apply to pea foliage during the pollen shed period.

Peppers	Aphids, Colorado Potato Beetles, Flea Beetles, Leafhoppers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 5 days of harvest.
Potatoes	Aphids, Flea Beetles, Leafhoppers, Colorado Potato Beetles, Southern Armyworms, Dipterous Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 25 days of harvest. Note: Do not use on commercially-grown potatoes which will be hand-harvested.
Radishes	Aphids, Flea Beetles, Leafhoppers, Imported Cabbage-worm, Dipterous Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat applications every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
Radishes	Cutworms (Surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
Sprouts	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.

Squash, Summer	Aphids, Thrips, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 7 days of harvest.
Squash, Winter	Aphids, Thrips, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 3 days of harvest.
Sweet Corn	Aphids, Flea Beetles, Grasshoppers, Spider Mites	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat applications every 7 days up to 5 applications per season. Corn may be picked immediately following last application.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil 12 days before planting. Immediately work into soil 1-2 inches.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 4-8 inches.

Note: To protect bees, do not apply to corn foliage during the pollen shed period.

Crop	Pest	Rate	Timing/Special Directions
Tomatoes	Aphids, Colorado Potato Beetles, Fall Armyworms, Flea Beetles, Leafhoppers, Southern Armyworms, Vinegar Flies ( <i>Drosophila</i> spp.)	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days up to 5 applications per season. Do not apply within 1 day of harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 4-8 inches.
Turnips and Turnip tops	Aphids, Flea Beetles, Leafhoppers, Rooted Cabbage-worm, Dopterous Leafminers	2 tablespoons in 3 gals. of water to cover 1,000 sq. ft. of garden	Thoroughly spray all plant parts. Repeat applications every 7 days up to 5 applications per season. Do not apply within 10 days of harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Broadcast to the soil just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

**STORAGE AND DISPOSAL**

**STORAGE:** Do not store near heat or open flame. Store in original container in an area inaccessible to children and pets.

**DISPOSAL:** Do not reuse empty container. Thoroughly rinse container, securely wrap it in several layers of newspaper and discard in trash. If disposal of a partially full container is necessary, make sure cap is tightly closed, securely wrap the container in several layers of newspaper and discard in trash.

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**WARNING**

May be fatal if swallowed or absorbed through skin. Avoid breathing spray mist. Causes substantial but temporary eye damage. Do not get into eyes, on skin or clothing. Wear goggles or safety glasses. Avoid contact with eyes and skin. Wash thoroughly if on skin and after handling. Do not use in the home. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans. Do not permit children or pets to go onto treated area, such as grass or soil until the spray has dried. Do not contaminate ornamental fish ponds. Food utensils such as spoons and measuring cups must not be used for food purposes after use in measuring pesticides.

**STATEMENT OF PRACTICAL TREATMENT**

**IF SWALLOWED:** Call a physician immediately. **DO NOT INDUCE VOMITING UNLESS NO OTHER TREATMENT IS AVAILABLE.** Vomiting may cause aspiration pneumonia. If it is necessary to induce vomiting, give victim one or two glasses of water and insert finger in back of throat. Do not induce vomiting or give anything by mouth if person is unconscious or convulsing.

**IF INHALED:** Remove victim to fresh air and apply artificial respiration if indicated.

**IF ON SKIN:** Wash promptly with soap and water. Rinse thoroughly.

**IF IN EYES:** Rinse eyes with plenty of water and call a physician immediately.

**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. This product contains a xylene range aromatic solvent which may present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

**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 certain 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. Application rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping of sprays. Where irrigation (watering) is recommended in the directions, or if waterfowl, (i.e., ducks or geese, can be expected in the treated area after treatment, (except spot treatment), apply a minimum of 1/4 inch of water immediately after applying this product. Stop irrigation before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). 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.

The pesticide is highly toxic to bees exposed to direct treatment or to residue 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. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use, pour, spill, or store near heat or open flame.