

U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF PESTICIDES PROGRAMS  
REGISTRATION DIVISION (TS-767)  
WASHINGTON, DC 20460

EPA REGISTRATION NO.

DATE OF ISSUANCE

11656-69

MAY 15 1987

TERM OF ISSUANCE

Until Reregistered

NAME OF PESTICIDE PRODUCT

Diazinon 50WP Insecticide

NOTICE OF PESTICIDE:  REGISTRATION  
 REREGISTRATION

(Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended)

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Western Farm Service, Inc.  
3075 Citrus Circle, Suite 195  
Walnut Creek, CA 94598

167 / 184124  
18 / 1

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provides that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) 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:

- a. Add the phrase "EPA Registration No. 11656-69."
- b. Uppercase D in Diethyl.
- c. Change "le etiqueta" to "la etiqueta."
- d. Use the full product name "Diazinon 50WP Insecticide" or "this product" wherever it appears in the Directions for Use.
- e. The Notice of Warranty is not acceptable as written. Refer to the enclosed memorandum "Warranties, Disclaimers, and Limitations on Pesticide Labels" for guidance. Revise your Notice of Warranty.

**BEST AVAILABLE COPY**

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

- f. Delete the paragraph regarding the reformulation of this product into dilute dust products. This product is an end-use product and not a manufacturing-use product. A separate registration for formulating this product into end-use products must be obtained.
- g. Under seed treatment-planter box treatment add the following precautions:

Treated seed must not be used for or mixed with food or animal feed, or processed for oil. Treat only those seeds needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seeds beyond planting time.

Exposed treated seeds may be hazardous to birds and other wildlife. Dispose of all excess treated seeds by burial away from bodies of water.

3. Provide the following data matrix information:

- o Statement of Composition - a brief description of the formulation process.

4. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

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.

George T. LaRocca  
Product Manager (15)  
Insecticide-Rodenticide Branch  
Registration Division (TS-767C)

Enclosures

**BEST AVAILABLE COPY**



THIS PRODUCT MUST NOT BE USED ON  
GOLF COURSES AND SOD FARMS  
**DIAZINON 50 WP**  
**INSECTICIDE**

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

|   |             |
|---|-------------|
| ACTIVE INGREDIENT   | BY WEIGHT   |
| Diazinon:0,0-Diethyl 0-(2-<br>isopropyl-6-methyl-4-pyrimidinyl)<br>phosphorothioate ..... | 50%         |
| INERT INGREDIENTS .....   | 50%         |
|   | <u>100%</u> |

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING — AVISO**  
FOR AGRICULTURAL USE ONLY. DO NOT  
STORE IN AREAS ACCESSIBLE TO  
CHILDREN.

PRECAUCION AL USUARIO: Si usted no lee ingles,  
no use este producto hasta que le etiqueta haya  
sido explicado ampliamente.

SEE BACK PANEL FOR ADDITIONAL  
PRECAUTIONARY STATEMENTS

ACCEPTED  
with COMMENTS  
Re EPA Letter Dated:

MAY 15 1987

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

11656-109

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Call a physician or Poison Control Center immediately.  
Drink one or two 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 to an unconscious  
person.

If Inhaled: Remove victim to fresh air. Apply artificial respiration  
if indicated.

If On Skin: Remove contaminated clothing and wash affected areas  
thoroughly with soap and water.

If In Eyes: Flush eyes with plenty of water. Call a physician if  
irritation develops or persists.

NOTE TO PHYSICIAN: Gastric lavage is indicated. Diazinon 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.

SEE SUPPLEMENT FOR USE DIRECTIONS.

NET WEIGHT \_\_\_\_\_ lbs.

EPA Reg. No. 11656-

**BEST AVAILABLE COPY**

**WESTERN FARM SERVICE, INC.**

3075 Citrus Circle  
Walnut Creek, CA 94598

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

**WARNING!**

May be fatal if swallowed. May be absorbed through skin. Do not breathe dust or spray mist. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling and before eating or smoking. Avoid contamination of food and feed. Keep out of reach of domestic animals. Do not use on humans or household pets. Do not permit children or pets to go onto sprayed grass until spray has completely dried.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish, birds, and other wildlife. Birds feeding on treated areas may be killed. Do not apply directly to water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

This pesticide is highly toxic to bees exposed to direct treatment or to residues remaining on the treated area. Do not apply when bees are actively visiting the crop, cover crop, or weeds blooming in the treatment area. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

**DIRECTIONS FOR USE**

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

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS.**

**REENTRY STATEMENT**

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

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

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product.

**ORAL WARNINGS** shall inform workers of areas or fields that may not be entered, without protective equipment or clothing specified on this label, during treatment or until sprays have dried. Follow first aid treatment instructions shown on this label in case of accidental exposure.

When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers.

**WRITTEN WARNINGS** must include the following information.

**WARNING**-Area treated with Diazinon on  
(Date)

Do not enter without appropriate protective clothing until sprays have dried. Follow first aid treatment instructions shown on this product label in case of accidental exposure.

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

**STORAGE AND DISPOSAL**

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

**STORAGE**

Keep in original container. Do not reuse empty container. Store in cool dry place. Protect from excessive heat. For help with any spill, leak, fire or exposure involving this material, call day or night 800-424-9300.

**DISPOSAL**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes 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. Do not reuse container. Dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**NOTICE OF WARRANTY**

WESTERN FARM SERVICE MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PURPOSE, OR OTHERWISE, EXPRESS OR IMPLIED, concerning this product or its uses which extend beyond the use of the product under normal conditions in accord with the statements made on this label.

**BEST AVAILABLE COPY**

**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.

Diazinon 50 WP is registered for use on:

|                  |  |       |             |
|------------------|--|-------|-------------|
| Alfalfa          | Fly control in barns and animal housing quarters | Pears | Tree        |
| Almonds          | Cricket  | Pist  | Turkey      |
| Apples           | Cricket  | Peach | Turnip Root |
| Apricots         | Cricket  | Peach | Walrus      |
| Beans            | Cricket  | Peach | Walrus      |
| Beets            | Cricket  | Peach | Walrus      |
| Bermudagrass     | Cricket  | Peach | Walrus      |
| Blueberries      | Cricket  | Peach | Walrus      |
| Boysenberries    | Cricket  | Peach | Walrus      |
| Brassica         | Cricket  | Peach | Walrus      |
| Blueberry Sprawl | Cricket  | Peach | Walrus      |
| Cabbage          | Cricket  | Peach | Walrus      |
| Carrots          | Cricket  | Peach | Walrus      |
| Cauliflower      | Cricket  | Peach | Walrus      |
| Corn             | Cricket  | Peach | Walrus      |
| Cherries         | Cricket  | Peach | Walrus      |
| Citrus           | Cricket  | Peach | Walrus      |
| Cucumbers        | Cricket  | Peach | Walrus      |
| Onions           | Cricket  | Peach | Walrus      |
| Oranges          | Cricket  | Peach | Walrus      |
| Peaches          | Cricket  | Peach | Walrus      |
| Pears            | Cricket  | Peach | Walrus      |
| Peanuts          | Cricket  | Peach | Walrus      |

**Fruit and Nut Insects**

Diazinon 50 WP may be applied using ground or aerial application equipment. For dilute ground sprays, mix specified rate of this product and apply at 300 to 600 gals. of water per acre. For concentrate ground sprays, use equivalent rates\* of this product in minimums of 20-50 gals. of water per acre. For aerial applications, use equivalent ground rates\* of this product in minimums of 2-5 gals. of water per acre. Observe stated time intervals between last application and harvest.

\*NOTE: The rate of this product for concentrate ground and aerial sprays is based upon a dilute ground spray with conventional ground equipment applied at 300 to 600 gals. of water per acre. If directions call for 1 lb. of product per 100 gals. of water, this amounts to 3 to 6 lbs. of this product per acre when applied as dilute ground spray volumes.

**Almonds**  
Mites, Twig borers: Apply 1-1/2 lbs. of this product per 100 gals. of water as infestations develop.  
Scales (including San Jose, parlatoria, black, brown, apricot); Mite eggs (including European red mite, brown mite); Twig borers: Aphid eggs (including apple, black cherry, mealy plum); Mealybugs: Apply as a dormant spray 1-1/2 lbs. of this product plus 2-3 gals. of dormant oil or 1-1/2 gals. superior type oil per 100 gals. of water.  
Almond hulls may be fed to livestock.

**Apples**  
Leafhoppers: Apply 1 lb. per 100 gals. of water in 3-5 applications beginning at petal fall and continuing through the growing season, or apply as infestations develop.  
Scales (including San Jose, parlatoria, black, brown, apricot); Mite eggs (including European red mite, brown mite); Twig borers: Aphid eggs (including apple, black cherry, mealy plum); Mealybugs: Apply as a dormant or delayed-dormant spray 1 lb. of this product plus 2 gals. dormant oil or 1-1/2 gals. superior type oil per 100 gals. of water.  
Eyespotted bud moth, Fruitree leafroller, Mealybug: Mix 1 lb. per 100 gals. of water. Make 3-8 cover spray applications, beginning with the first cover. Applications should be timed according to insect infestations.  
Do not apply within 14 days of harvest.

**Apples and Pears**  
Codling moth, Rosy apple aphid, Green apple aphid, Woolly apple aphid, Mites: Mix 1 lb. of this product per 100 gals. of water. Make 3-8 cover spray applications, beginning with the first cover. Applications should be timed according to insect infestations.  
Fruit tree scale: Mix 1 lb. of this product per 100 gals. of water. Make 3-8 cover spray applications when flies are active and laying eggs.

**General Information**

Diazinon 50 WP 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 insects. Applications should be repeated as necessary to maintain control.

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

Since this product is a wettable powder formulation, constant agitation is necessary during application.

**Directions for Use**

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

San Jose scale crawlers, Forbes scale crawlers: Mix 1 lb. per 100 gals. of water. Apply early in the season when crawlers first appear. If infestation warrants, make a second application 7-10 days later.

Note: Mites will be suppressed if this product is used in the regular cover spray program. Slight russeting may occur on some varieties of apples, such as Golden Delicious.  
Do not apply to apples or pears within 14 days of harvest.

**Apricots**  
Scales (including San Jose, parlatoria, black, brown, apricot, walnut); Mite eggs (including European red mite, brown mite); Twig borers; Aphid eggs (including apple, black cherry, mealy plum); Mealybugs: Apply as a dormant spray 1 lb. of this product plus 2 gals. of dormant oil or 1-1/2 gals. superior type oil per 100 gals. of water.  
Aphids, Brown mite (Clover mite), Twospotted spider mite, Olive scale crawler, San Jose scale crawlers: Mix 1 lb. per 100 gals. of water. Apply when aphids, mites, and scale crawlers first appear.  
Olive scale crawlers: Mix 1/2 lb. of this product plus 1/2 gal. of light medium horticultural oil per 100 gals. of water. Apply when scale crawlers are present.  
Apricot mealybug: Mix 1 lb. per 100 gals. of water. Apply as a cover spray from petal fall to June.  
Do not apply within 10 days of harvest.

**Blueberries**  
Cranberry fruitworm, Cherry fruitworm, Blueberry maggot, Aphids, Thrips, Twospotted mite: Mix 1 lb. per 100 gals. of water. Apply up to 200 gals. of spray per acre, or apply 2 lbs. per acre in sufficient water for thorough coverage. Do not apply within 7 days of harvest.

**Caneberries (Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries)**  
Leafhoppers, Thrips, Aphids, Twospotted mite, Raspberry sawfly: Mix 1 lb. per 100 gals. of water and apply up to 200 gals. of spray per acre, or apply 2 lbs. per acre in sufficient water for thorough coverage.

Raspberry fruitworm: Apply at the above rates when blossom buds separate and repeat application immediately before blossoms open.

Oryberry mite: Mix 2 lbs. per 100 gals. of water. Apply as a dormant spray in early spring, when canes are still on the ground and buds are closed. Make a second application when the buds are well developed, but still closed.

Raspberry crown borer (Raspberry root borer): Mix 4 lbs. per 100-200 gals. of water and apply as a trench to the crown area and to the lower canes. Apply either in the spring before berries begin to form, or in the fall after harvest.

Do not apply within 7 days of harvest.

**Cherries**  
Scales (including San Jose, parlatoria, black, brown, apricot); Mite eggs (including European red mite, brown mite); Twig borers; Aphid eggs (including apple, black cherry, mealy plum); Mealybugs: Apply as a dormant spray 1 1/2 lbs. of this product plus 3 gals. dormant oil or 1-1/2 gals. superior type oil per 100 gals. of water.

Eyespotted bud moth, Fruitree leafroller: Mix 1 lb. per 100 gals. of water. Apply in cover sprays as necessary, beginning with petal fall.

Leafhoppers: Apply 1 lb. per 100 gals. of water in 3-5 applications beginning at petal fall and continuing through the growing season, or apply as infestations develop.

Cherry fruit fly: Mix 1/2-1 lb. per 100 gals. of water. Make 3 or 4 applications, beginning when adult flies begin to emerge and repeating at 10-day intervals.

Black cherry aphid: Mix 1 lb. per 100 gals. of water. Apply as a cover spray when aphids appear and repeat after 10 days.

San Jose scale crawler: Mix 1 lb. per 100 gals. of water. Apply during the pre-pink stage or when crawlers first appear.

Cherry rust mite: Mix 1/2-1 lb. per 100 gals. of water. Apply as a supplemental spray after harvest.

Do not apply within 10 days of harvest.

**Cranberries**  
Blackheaded fireworm, Rhopobota Mexicana: Apply 4 lbs. in 400 gals. of water per acre.

Cranberry fruitworm: Apply 6 lbs. in 400 gals. of water per acre.

Do not apply within 7 days of harvest.

**Figs**  
Vinegar fly (Drosophila spp.), Dried fruit beetle: Apply 1 lb. per 100 gals. of water. Do not apply within 5 days of harvest.

**Filberts**  
Filbert leafroller, Aphids: Apply 2-4 lbs. in 250-400 gals. of water per acre, as a thorough cover spray.

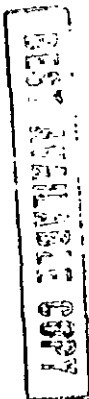
**Citrus Fruits (Grapefruit, Lemons, Limes, Oranges, Tangerines, Tangelos, Citrus Citron, Kumquats, and hybrids of these)**  
Citrus aphid, Cottony cushion scale crawlers, and Sulfur scale crawlers: Apply 1/2-1 lb. per 100 gals. of water (maximum 1000 gals. per acre) as a thorough cover spray when aphids and crawler stages of scale insects first appear.

Fruitree leafroller: Mix 1/2-1 lb. per 100 gals. of spray (maximum 1000 gals. per acre) when an average of 50 percent of eggs in egg masses have hatched in the spring.

Citrus thrip: Apply 1 lb. in 100 gals. of water (maximum 1000 gals. per acre) when thrips first appear.

Citrus snow scale: Apply 1-2 lbs. per 100 gals. of water (maximum 1000 gals. per acre) as a postbloom spray and again as a summer spray. For heavy snow scale infestations, use the higher dosage rate. Thorough coverage of tree trunk, limbs, and twigs is essential.

Do not apply during bloom. Do not apply to citrus within 21 days of harvest.



Pineapple mealybug: Apply 4 lbs. per acre. May be applied on day of harvest.

Pineapple loorage and refuse may be fed to livestock 7 days following last application.

#### Plums and Prunes

Scales (Including San Jose, varietaria, black, brown, aphid): Mite eggs (including European red mite, brown mite, pearleaf blister mite), Twig borers: Aphid eggs (including apple, black cherry, mealy plum): Mealybugs: Apply as a dormant spray 1 lb. of this product plus 2-3 gals. dormant oil or 1-1/2 gals. superphosphate per 100 gals. of water. For late April or May applications mix 1 lb. of this product plus 1 gal. of light medium summer horticultural oil per 100 gals. of water.

Brown mite (Clover mite), European red mite: Apply 1 lb. in 100 gals. of water.

Leafcurl plum aphid: Mealy plum aphid, Thistle aphid: Apply 1/2-1 lb. per 100 gals. of water.

Do not apply within 10 days of harvest.

#### Vegetable Foliar Insects

Diazinon 50 WP should always be applied as a spray in sufficient water to assure thorough coverage of the foliage.

Beans (Pole Beans, Snap Beans, Lima Beans) Black bean aphid, Mexican bean beetle, Leafminers: Apply 1-1 1/2 lbs per acre.

Cucumber beetle: Apply 1/2-1 lb. in 100 gals. of water per acre.

Do not apply within 7 days of bean harvest. Bean foliage or bean hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if foliage is to be cut for hay.

#### Lima Beans

Dipterous leafminer, Leafhoppers, Mites: Apply 1 lb. per acre. Do not apply within 7 days of bean harvest. Bean foliage or bean hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if foliage is to be cut for hay.

#### Broccoli, Cabbage, Cauliflower

Aphids, Diamondback moth, Imported cabbageworm, Dipterous leafminer: Apply 1/2-1 lb. per acre. Applications at 7-10 day intervals will usually be required. Do not apply to broccoli or cauliflower within 5 days, or to cabbage within 7 days, of harvest.

#### Brussels Sprouts

Aphids, Diamondback moth, Imported cabbageworm: Apply 1 lb. per acre. Applications at 7-10 day intervals will usually be required. Do not apply to brussels sprouts within 7 days of harvest.

#### Carrots

Aphids: Apply 1 lb. per acre. Do not apply within 10 days of harvest.

#### Celery

Aphids, Flea beetles: Apply 1 lb. in 100 gals. of water per acre.

Dipterous leafminer: Apply 1/2-1 lb. per acre in sufficient water to achieve thorough coverage when infestations first appear. Repeat as necessary.

Do not apply within 10 days of harvest. Plants should be market trimmed (tops removed) before being shopped or used. Tops should not be used for feed or food.

#### Collards, Kale, Swiss Chard, Turnip Tops

Aphids, Imported cabbageworm, Diamondback moth, Harlequin cabbage bug, Corn earworm: Apply 1/2-1 lb. per acre. Do not apply to collards, kale or turnip tops within 10 days, or to swiss chard within 12 days, of harvest.

#### Cucumbers

Aphids, Serpentine leafminer, Thrips: Apply 1 lb. per acre. Do not apply within 7 days of harvest.

#### Lettuce and Endive

Aphids, Dipterous leafminer: Apply 1/2-1 lb. per acre. Do not apply within 10 days of harvest.

Melons and Squash (Cantaloupes, Casabas, Green, Honeycrisp, Muskmelons, Persian Melons, and hybrids of these): Watermelons and their hybrids: Strawberry and Winter Squash

#### Strawberries

Aphids, Two-spotted spider mite: Apply 1 lb. in 100 gals. of water per acre.

Cyclamen mite: Apply 2 lbs. in 100 gals. of water per acre, directing spray to plant crowns. Plants should be sufficiently agitated to assure thorough coverage of the foliage. Make additional applications, if necessary, after harvest.

Mole cricket: Broadcast 2 lbs. per acre when insects are present. Apply 1-2 days before transplanting and mix into the top 1-2 inches of soil immediately.

Strawberry leafroller: Mix 1/2-1 lb. per 100 gals. of water. Apply 200 gals. spray per acre when blossoms show color.

Do not apply within 5 days of harvest.

#### Walnuts

Aphids, Mites: Apply 2 lbs. per acre as a foliage spray

Codling moth, Scale crawlers, Walnut caterpillar: Apply 2 lbs. per acre.

Do not apply after the husks open.

Aphids, Leafhoppers, Mites: Apply 1-1 1/2 lbs. per acre.

Serpentine leafminer, Thrips: Apply 1/2-1 lb. per acre.

Do not apply to melons or winter squash within 3 days, or to summer squash within 7 days, of harvest.

#### Mushroom Houses

Mushroom flies (Phorids and Sciarids): Mix 4-8 lbs. in 50 gals. of water (0.5% to 1.0% actual Diazinon) and spray on outside and inside walls and ventilators of mushroom houses, after compost in beds has been pasteurized by heating. Do not spray compost in beds or after spawning.

To treat wooden sides of beds, posts, doors, and door frames after pasteurizing, mix 1/2 lb. in 5 gals. of water and apply with a brush.

Do not treat compost.

#### Onions

Onion thrips: Apply 1 lb. per acre. Do not apply within 10 days of harvest.

#### Peas

Aphids, Leafminers: Apply 1/2-1 lb. per acre. Peas may be picked immediately. Pea vines and pea vine hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if foliage is to be cut for hay.

#### Peppers

Aphids, Serpentine leafminer: Apply 1/2 lb. per acre. Do not apply within 5 days of harvest.

#### Potatoes

Aphids, Flea beetles, Colorado potato beetle, Dipterous leafminer: Apply 1/2-1 lb. per acre.

Banded cucumber beetle, Leafhoppers, Southern armyworm: Apply 1/2-1 lb. per acre.

Do not apply within 35 days of harvest

#### Radishes, Parsnips, Turnips

Aphids, Flea beetles, Dipterous leafminer: Apply 1/2-1 lb. per acre. Do not apply within 10 days of harvest

#### Spinach and Beets

Aphids, Dipterous leafminer: Apply 1/2-1 lb. per acre. Do not apply to spinach within 10 days, or to beets within 14 days, of harvest.

#### Squash (Summer and Winter)

See Melons and Squash section.

#### Sweet Corn

Corn earworm: Apply 2-2 1/2 lbs. per acre when silks first appear. Two or three repeat applications at 2-3 day intervals will usually be necessary. Corn may be picked immediately following last application. Corn foliage may be fed to dairy and beef cattle and sheep.

Refer also to Corn under Field and Forage Insects

#### Tomatoes

Aphids, Dipterous leafminer: Apply 1/2 lb. per acre. To control leafminers weekly applications are usually required.

Banded cucumber beetle, Fall armyworm, Southern armyworm: Apply 1/2-1 lb. per acre.

Cyclamen mite: Apply 1 lb. in 100 gals. of water per acre. Direct spray to crowns and growing tops.

Do not apply within 1 day of harvest

#### Vegetable Soil Insects

Diazinon 50 WP should always be applied as a spray in sufficient water to assure thorough coverage of the soil.

#### Carrot root fly

Carrots: Apply 4 lbs. per acre as a drench to the seed furrow at planting time.

#### Cutworms (Surface and Subterranean)

|                  |            |               |
|------------------|------------|---------------|
| Broccoli         | Kale       | Snap Beans    |
| Brussels Sprouts | Lettuce    | Spinach       |
| Cabbage          | Lima Beans | Summer Squash |
| Cantaloupes      | Muskmelons | Sweet Corn    |
| Cauliflower      | Parsley    | Swiss Chard   |
| Celery           | Peas       | Tomatoes      |
| Collards         | Peppers    | Watermelons   |
| Cucumbers        | Potatoes   | Winter Squash |

BroadCast 4-8 lbs. per acre just prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

#### Garden symphlyans (Centipedes)

|         |            |            |
|---------|------------|------------|
| Cabbage | Peas       | Snap Beans |
| Carrots | Pole Beans | Tomatoes   |
| Corn    | Radishes   | Turnips    |
| Lettuce | Red Beets  |            |

BroadCast 20 lbs. per acre just prior to planting. Work into soil 4-8 inches immediately. This preplant treatment will also control other soil insects: cutworms (surface and subterranean), mole crickets, root maggots, and wireworms.

#### Mole crickets

|                  |                   |          |
|------------------|-------------------|----------|
| Broccoli         | Endive (escarole) | Peppers  |
| Brussels Sprouts | Kale              | Radishes |
| Cabbage          | Lettuce           | Tomatoes |
| Cauliflower      | Mustard           | Turnips  |
| Collards         |                   |          |

BroadCast 2 lbs. per acre when insects are present. Make application to plant beds or fields 1-2 days prior to sowing of seed or transplanting and work into soil 1-2 inches immediately.

#### Onion maggots

Onions: Furrow Application: Apply 2 lbs. per acre in sufficient water to drench the seed furrow at planting time.

#### Field and Forage Insects

Diazinon 50 WP should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil, depending on the type of application.

#### Alfalfa, Clover and Trefoil

Spotted alfalfa aphid, Yellow clover aphid, Pea aphid, Leafhoppers, Plant bug nymphs, Mites: Apply 1/2-1 lb. per acre.

Grasshoppers: Apply 1 lb. per acre.

Cutworms (Surface and Subterranean): Broadcast 4-8 lbs. per acre just prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

Dairy and beef cattle and sheep (1) may be grazed immediately following application (2) may be fed green alfalfa or clover immediately following cutting, and (3) may be fed hay provided alfalfa or clover is not cut for hay for 7 days following treatment.

Alfalfa weevil larvae: For control in the spring, apply 2-3 lbs. per acre when feeding damage to growing tips becomes evident. Repeat application, if necessary, if damage is already extensive. Cut the hay and make application to the stubble. Do not graze dairy and beef animals or sheep for 2 days. Do not cut for hay for 10 days following treatment.

Do not spray livestock directly except as indicated below under Livestock Insects, with either air or ground equipment.

Do not treat during bloom to avoid injury to pollinating insects

Cyclamen mite: Apply 1 lb. in 100 gals. of water per acre. Direct spray to crowns and growing tops. Repeat applications as necessary. Do not apply within 5 days of harvest.

#### Root maggots

Broccoli, Brussels sprouts, Cabbage, and Cauliflower (1) Broadcast Application: Broadcast 4-8 lbs. per acre just prior to planting. Work into soil 3-4 inches immediately. (2) Transplant Water (Drench) Application: Mix 1/2-1 lb. in 50 gals. of transplant water, with 200-300 gals. of water are used per acre. May be applied at the rate of 1/2-1 cupful per plant, either hand or by tractor-mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. Transplant water treatments may result in stand reduction due to plant stress at time of transplant.

Radishes: Mix 2 lbs. in 50 gals. of water. Apply 80-100 gals. per acre. (1-1 1/2 gals. per 1000 linear feet of row in the seed furrow at planting time.

#### Wireworms

|                  |                   |                |
|------------------|-------------------|----------------|
| Broccoli         | Endive (escarole) | Snap Beans     |
| Brussels Sprouts | Kale              | Spinach        |
| Cabbage          | Lettuce           | Summer Squash  |
| Cantaloupes      | Lima Beans        | Sweet Corn     |
| Carrots          | Muskmelons        | Sweet Potatoes |
| Cauliflower      | Onions            | Swiss Chard    |
| Celery           | Parsley           | Tomatoes       |
| Collards         | Peas              | Watermelons    |
| Cucumbers        | Peppers           | Winter Squash  |

BroadCast 6-8 lbs. per acre prior to planting, and work into soil 4-8 inches immediately.

Potatoes: Broadcast 6-12 lbs. per acre prior to planting. Immediately disk or harrow into soil 4-8 inches.

#### Southern potato wireworm

Potatoes (Southeastern U.S.): For potatoes on mineral soils, broadcast 4-8 lbs. per acre prior to planting, and immediately work into soil 3-6 inches depending on location of wireworms.

#### Corn

#### Corn rootworm larvae — (Postemergence Basal Treatment)

Apply 1 1/2-2 1/2 oz. per 1000 linear feet of corn row in sufficient water to wet base of corn plant and a narrow band of soil next to the plant. Refer to row soiling chart for amounts recommended per acre. Cover treated band with 2-3 inches of soil using a disk harrow or cultivator immediately after spraying. Application should be made at the first sign of corn rootworm larvae. Application should not be made later than June 24 in the Middle Corn Belt or July in the Northern Corn Belt.

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**SUGGESTED RATES ACCORDING TO ROW SPACING FOR CORN ROOTWORM LARVAE CONTROL**

| Spacing | Linear Feet of Corn Rows per Acre | Amount of Diazinon 50 WP Per Acre | Postemergence Basal Treatment |
|---------|-----------------------------------|-----------------------------------|-------------------------------|
| 48"     | 10 393                            | 14.23 oz.                         |                               |
| 42"     | 12,455                            | 15 1/2-31 oz.                     |                               |
| 40"     | 13 658                            | 16-32 oz. (1-2 lbs)               |                               |
| 38"     | 13 939                            | 17 1/2-35 oz.                     |                               |
| 36"     | 14 250                            | 18-36 oz.                         |                               |
| 30"     | 17,424                            | 22-44 oz. (1 1/2-2 1/4 lbs)       |                               |
| 24"     | 21,780                            | 27 1/2-55 oz.                     |                               |
| 20"     | 26,135                            | 32-64 oz. (2-4 lbs)               |                               |
| 15"     | 34 843                            | 44-88 oz.                         |                               |

Note: For row spacings not listed calculate the appropriate dosage rates based on the 40-inch row figures.

Seedcorn maggot: Broadcast 4-8 lbs. per acre just prior to planting. Work into 2 inches of soil immediately.

Cutworms (Surface and Subterranean): Broadcast 4-8 lbs. per acre. For surface cutworms apply just prior to planting or when larvae first appear and work into 1-2 inches of soil immediately. Do not apply later than layby. For subterranean cutworms, apply just prior to planting and work into 3-6 inches of soil immediately.

Wireworms: Apply 6-8 lbs. per acre prior to planting and work into 4-8 inches of soil immediately.

Corn leaf aphid: Apply 1-2 lbs. per acre in sufficient water to provide complete coverage of the upper portions of plants. Repeat application as necessary.

Grasshoppers: Apply 1 lb. per acre.

Sap beetle: Apply 2-2 1/2 lbs. per acre. Add 1-2 gals. of soluble mineral oil per acre to the spray mixture. Consult local agricultural authorities for proper timing of sprays.

Corn may be picked immediately following last application. Corn forage may be fed to dairy and beef cattle and sheep.

Cotton  
Spider mites, Aphids, Leafhoppers, Lygus bug, Cotton leafworm, Cotton leafperforator: Apply 1-2 lbs. in 5-25 gals. of water per acre. Repeat as infestation warrants.

Do not apply within 14 days of harvest. Do not graze treated cotton plants, or feed gin wastes to livestock.

Cowpeas  
Cutworms (Surface and Subterranean): Broadcast 4-8 lbs. per acre, just prior to planting. Work into 2-3 inches of soil for surface cutworms, 3-6 inches for subterranean cutworms.

Koys  
Aphids, Mites, Aooty 2 lbs. per acre. Do not apply within 14 days of harvest.

Lespedeza  
Cutworms (Surface and Subterranean): Broadcast 4-8 lbs. per acre just prior to planting. Work into 2-3 inches of soil immediately for surface cutworms, 3-6 inches for subterranean cutworms.

Peanuts  
Cutworms: Apply 4 lbs. per acre in a 12-inch band over the row. Use sufficient water to achieve thorough coverage. Begin application when small larvae appear.

**Range, Pasture, and Grassland Insects**

Bermudagrass  
Thrips, Whiteflies, C. sschoppers: Apply 1 lb. per acre.

Rangeland, Pasture, Grass Forage, Ditch Banks, Road-  
sides, Wasteland, Ngncop Areas, Range Strips

Grasshoppers: Apply 1-1 1/2 lbs. per acre in sufficient water to provide thorough coverage when insects are in the nymphal stage.

Two or three additional applications at 3-week intervals may be necessary. Do not apply within 21 days of peanut harvest.

Note: Livestock (1) may be fed peanut hulls, (2) may be fed peanut forage 7 days following treatment, and (3) may be fed peanut hay 21 days following treatment.

Sorghum  
Sorghum midge: Apply 1/2-1 lb. per acre when 90% of the heads have emerged from the boot. Repeat application within 4 days.

Crop may be fed to livestock immediately following treatment. Do not apply within 7 days of harvesting for grain.

Cutworms (Surface and Subterranean): Broadcast 4-8 lbs. per acre just prior to planting. Work into 2-3 inches of soil immediately for surface cutworms, 3-6 inches for subterranean cutworms.

Soybeans  
Cutworms (Surface and Subterranean): Broadcast 4-8 lbs. per acre just prior to planting. Work into 2-3 inches of soil immediately for surface cutworms, 3-6 inches for subterranean cutworms.

Sugar Beets  
Beet leafhopper, Dipterous leafminer, Aphids: Apply 1/2-1 lb. per acre.

Grasshoppers: Apply 1 lb. per acre.  
Wireworms: Broadcast 6-8 lbs. per acre just prior to planting, and work into 4-8 inches of soil immediately. Tops may be fed to beef and dairy animals.

Sugarcane  
Aphids: Apply 1/2-1 lb. per acre.

Note: Allow 1 day between last application and harvest. Bagasse and forage may be fed to livestock.

Wireworms: Apply 8 lbs. per acre on a 12-inch band centered over the furrow in sufficient water to obtain thorough coverage. Make application directly to seed pieces in open furrow at covering time.

Tobacco  
Aphids, Flea beetles: Apply 1/2-1/2 lb. per acre. Do not apply within 3 days of harvest.

Cutworms: Broadcast 4-6 lbs. per acre before transplanting and work into 2-4 inches of soil immediately.

Green June beetle larvae: Mix 1/2 lb. in 50 gals. of water and apply as a drench (100 gals. per 100 sq. yds.) to uprooted areas of plant beds with sprinkling can.

Male cricket: Broadcast 2 lbs. per acre, when insects are present. Make application to beds or fields 1-2 days prior to sowing seed or transplanting, and work into 1-2 inches of soil immediately.

Seedcorn maggot: Broadcast Application: Broadcast 3 lbs. per acre, 3-4 weeks before transplanting. Work into 2 inches of soil immediately.

Transplant Water Application: Mix 1 1/2-3 oz. in 50 gals. of transplant water.

Wireworms: Broadcast Application: Broadcast 4-6 lbs. per acre, 3-4 weeks before transplanting. Work into 6-9 inches of soil immediately.

Transplant Water Application: Mix 1 1/2-3 oz. in 50 gals. of transplant water.

Dairy and beef cattle and sheep (1) may be grazed immediately following application, (2) may be fed green forage immediately following cutting, and (3) may be fed hay, provided grass is not cut for hay for 21 days if the spray is a water solution or for 30 days if the spray is an oil solution. Do not spray livestock directly with either air or ground equipment except as indicated below under Livestock Insects. Do not repeat application for 30 days.

**Livestock Insects**

Sheep "Ticks" (Keds), Lice

High gallonage, high pressure spray: Mix 1/2 lb. in 100 gals. of water, and apply at the rate of 1 gal. per animal.

Low gallonage, low pressure spray: Mix 1 lb. in 100 gals. of water. Apply at the rate of 1 qt. per animal.

**Ornamental Insects**

To control certain insects on ornamentals, such as Arborvitae, A-zalea, Birch, Boxwood, Camelia, Carnation, Chrysanthemum, Douglas Fir, Elm, Gladiolus, Hawthorn, Holly, Juniper, Lilac, Locust, Maple, Oak, Pine, Plum, Poplar, Rhododendron, Rose, Spruce, and Willow, apply the recommended rates indicated below.

| Insects  | Amount 50 WP to use |                     |
|--|---------------------|---------------------|
|  | per 3 gals. water   | per 100 gals. water |
| Aphids, Bagworms, Carnation bud mites, Carnation shoot mites, Clover mites, Cyclamen mites, Dipterous leafminers, European pine shoot moths, European red mites, Flea beetles, Holly bud moths, Leafhoppers, Obscure root weevils, Omnivorous leafhoppers, Prist mites, Scale crawlers (Cottony cushion), Lecanium, Pine needle, San Jose, Soft scales, Thrips, Twospotted mites, Webworms, Whiteflies | 1/2 oz.             | 1 lb.               |

**Lawn Insects**

To control insects listed below, apply recommended rates. For insects such as Ants, Brown dog ticks, Clover mites, Crickets, Earwigs, Fleas, Millipedes, Sowbugs, and Springtails (Collembola), which are commonly found near the house and may enter the house, spray a 5-ft. band of soil around the house as well as the house foundation wall to a height of 2-3 ft. Repeat application if necessary.

| Insects  | Rate/1000 sq. ft.  |           | Remarks   |
|--|--------------------|-----------|---|
|  | Diazinon 50 WP     | Water     |   |
| Lawn chinch bugs   | 2-3 oz. of 3-6 oz. | 25 gals.* | Use higher rate for longer residual control and in lawns of dense growth, such as St. Augustine lawns.  |
| Ants, Armyworms, Clover mites, Springtails (Collembola), Crickets, Cutworms, Dog wags, Earwigs, Fielded Lawn billbugs, Sod webworms, Lawn moths, Sowbugs | 4 oz.              | 3 gals.   | Spot spray ant hills and wasp ground nest openings.<br>For lawn billbugs, irrigate the lawn thoroughly immediately after treatment.<br>For fire flies, mow grass and water well before treatment but city application until grass is dry. Do not water again until necessary. |

**Dust Formulations Based on Diazinon 50 WP**

Diazinon 50 WP is recommended for use in formulating dilute dust products. Formulators should contact the Specialty Products Sales Department, Agricultural Division, for information regarding proper diluents and suggested formulae.

**Seed Treatment-Planter-Box Treatment**

Corn  
Seedcorn beetle: Mix 3 oz. per bushel of seed as a dry mixture in the planter box as a seed treatment prior to planting.

Corn, Peas, Soybeans, and Beans (Lima, Snap, White, and Kidney)  
Seedcorn maggot: Mix 1/2 oz. per bushel of seed as a dry mixture in the planter box as a seed treatment prior to planting.

Sprinkler Can Mix 1 oz. in 6 gals. of water. Crown sheep into a small pen and sprinkle 1 qt. 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.

| Insects  | Amount 50 WP to Use |                     |
|--|---------------------|---------------------|
|  | per 3 gals. water   | per 100 gals. water |
| Apple-and-thorn skeletonizers, Coloradoan webworms, Fall webworm, Nemlock cherries, Oak looper, Quebedad leafrollers, Pear slug, Tent caterpillars | 1 1/2 oz.           | 3 lbs.              |

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

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

| Insects   | Rate/1000 sq. ft. |           | Remarks  |
|---|-------------------|-----------|--|
|   | Diazinon 50 WP    | Water     |  |
| Brown dog ticks, Bermudagrass mites, Crickets, Fleas, Leafhoppers | 1 1/2 oz.         | 3 gals.   | Do not apply to animals.<br>For brown dog ticks, spray grass and under shrubbery, particularly near house. |
| Millipedes  | 8 oz.             | 3 gals.   |  |
| Rhododendron scales   | 3 oz.             | 25 gals.* | Apply when crawler first emerge.   |

\*Application can be made in 3 gals. of water per 1000 sq. ft. Thoroughly water treated area immediately after application.

Boxelder bugs: Spray bugs outside the home with 1 1/2-2 1/2 oz. in 1 gal. of water. At the same time, spray thoroughly around foundation, windows, doors, tree trunks, and into cracks and other places where the insects hide.

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## Fly Control

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

**Residual Sprays:** Remove animals from buildings prior to treatment and keep animals out for at least four hours. Mix 2 lbs. of this product in 25 gals. of water and apply as an overall spray to ceilings and walls of livestock sheds, calf barns, hog barns, foaling 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 lbs. in 25 gals. of water. Applications should be made to point of run-off. One gal. of the above spray should cover from 350-750 sq. ft. of area, depending on the surface treated. Repeat applications as fly populations warrant.

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

For knapsack or similar type sprayer, mix  $\frac{1}{2}$  lb. with the sugar in  $2\frac{1}{4}$  gals. 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 oz. with the sugar in 5 gals. 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.

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