

Ms. Judy Oldham
Helena Chemical Company
6075 Poplar Avenue, Suite 500
Memphis, TN 38119

Dear Ms. Oldham:

Subject: Amendment- Revise per Diazinon Registration Standard
Diazinon 40W
EPA Registration No. 5905-444
Your submission dated August 27, 1993

This 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. Under ENVIRONMENTAL HAZARDS change "For terrestrial uses. Do not" to "For terrestrial uses, do not".

b. Under SUGAR BEETS change "Beef Leafhoppers" to "Beet Leafhoppers".

c. Under LIVESTOCK INSECTS Sheep "Ticks" change "Mix 2/3 lb. in 100 gals. of water" to "Mix 5/8 lb. in 100 gals. of water".

d. Under FLY CONTROL IN LIVESTOCK STRUCTURES "For knapsack or similar type sprayer, mix 2/3 lb. with the sugar..." to read "For knapsack or similar type sprayer, mix 5/8 lb. with the sugar...".

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e. Under INSECT CONTROL ON ORNAMENTALS Mimosa Webworms: change "Mix 2/3 oz. in 3 gallons of water..." to read "Mix 2/3 oz. in 3 gallons of water...".

f. Under LAWN PEST CONTROL (EXCLUDING GOLF COURSES AND SOD FARMS) change "i.e., ducks, geese, can" to "i.e., ducks or geese, can".

g. Your label must incorporate worker protection labeling. Refer to PR Notice 93-7 and 93-11. Your proposed revisions, together with the Agency's April 6, 1994 comments should be incorporated.

3. Submit three (3) 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.

Your current Confidential Statement of Formula (CSF) does not list the impurities of toxicological concern separately nor does it include the diazinon certification for FIFRA Sec. 12(a)(1)(C), that the description of this product refers to the composition set forth on the CSF and supporting materials as required by the Diazinon Registration Standard, as well as the certification regarding the determination of the certified limits of the toxicological significant impurities, i.e., reliance on your diazinon supplier's analysis of their technical. Please check with each of your diazinon suppliers in this regard and update your CSF accordingly.

We note that you list two different suppliers for diazinon. For each supplier you must submit separate CSF forms because the impurities of toxicological concern for diazinon are different for each technical.

Sincerely,

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

Enclosure

RESTRICTED USE PESTICIDE
Due to Avian and Aquatic Toxicity
 For retail sale to and use by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's Certification.

**HELENA
 DIAZINON 40W
 INSECTICIDE**

For Control of Certain Insects and Mites on Fruits, Nuts, Vegetables,
 Field Crops, Lawns and Ornamentals.
 For specific pests, refer to use directions in booklet.

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

ACTIVE INGREDIENT:

Diazinon: O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)	
phosphorothioate.....	40.00%
INERT INGREDIENTS	60.00%
TOTAL	100.00%

Diazinon 40W is a wettable powder.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See Additional Precautionary Statements Inside Booklet

EPA REG. NO.: 5905-444
 EPA EST. NO.: First letters of product
 batch code indicate producing
 establishment: 5905-GA-1=CG.
 5905-AR-1=WA. 5905-CA-1=KC.
 5905-IA-1=DI

ACCEPTED
 with COMMENTS
 In EPA LETTER 8/2/93

NET CONTENTS:

400g 1995

Under the Federal Insecticide,
 Fungicide, and Rodenticide Act
 as amended, for the pesticide
 registered under EPA Reg. No.
5905-444

MANUFACTURED BY
 HELENA CHEMICAL COMPANY
 MEMPHIS, TN 38137

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

CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Do not breathe dust or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Avoid contamination of food and feed. Keep out of reach of domestic animals. Do not use on humans or pets. Do not contaminate ornamental fish ponds. Do not permit children or pets to go onto spray grass until spray has completely dried. For foliar application to agricultural crops whose culture involves hand labor, there is a 24-hour reentry period (see Reentry Statement.) Be sure to read and follow "Work Safety Rules" appearing in this booklet.

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 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 develops or persists.

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.

ENVIRONMENTAL HAZARDS

This product is highly toxic to birds, fish and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Because of the migratory habits of Atlantic Coast waterfowl, do not apply this product to lawns in Nassau County, New York between November 1 and May 20. Do not exceed maximum permitted label rates. Rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Avoid overlapping of sprays. If waterfowl, i.e. ducks or geese, can be expected in the treated area after treatment (except spot treatments), apply a minimum of ¼ inch water immediately after applying this product. Stop irrigation before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes and estuaries. For terrestrial uses. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab, and other aquatic life are important resources.

Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

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

the treatment area.

PHYSICAL OR CHEMICAL HAZARDS

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

DIRECTIONS FOR USE

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

STORAGE AND DISPOSAL

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

Pesticide:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If pesticide, spray mixture or rinsate 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:

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. In the event of a major spill, fire, or other emergency, call Chemtrec, 1-800-424-9300 day or night.

IMPORTANT: Read the entire DIRECTIONS FOR USE and the CONDITIONS OF SALE AND WARRANTY before using this product. If terms are not acceptable, return the unopened product container at once.

GENERAL INFORMATION

Diazinon 40W is an 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.

Since **Diazinon 40W** 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.

Work Safety Rules

REPEATED EXPOSURES TO CHOLINESTERASE INHIBITORS SUCH AS ARE CONTAINED IN THIS PRODUCT MAY, WITHOUT WARNING, CAUSE PROLONGED SUSCEPTIBILITY TO VERY SMALL DOSES OF ANY CHOLINESTERASE INHIBITOR.

When handling **Diazinon 40W**, do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See Practical Treatment section of this label. When handling this product, wear the personal protective equipment listed in the following section.

PERSONAL PROTECTIVE EQUIPMENT

Long-sleeved shirt, long-legged pants, shoes and socks, and chemical-resistant gloves.

Do not apply this product in a way that will contact unprotected workers, either directly or through drift. Only protected handlers may be in the area during application.

Reentry Statement

Twenty-four hours must elapse between the time of application to vegetables, fruits, nuts and field crops and the time a worker enters or is allowed to enter the treated area, unless the person entering the treated area is wearing the personal protective equipment listed above. For lawns, ornamentals, or noncrop areas, do not enter or allow entry into treated areas without personal protective equipment until sprays have dried.

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 (See Note below.)

In vegetables, fruit trees, or field crops, 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 must inform workers of areas or fields that may not be entered without specific personal protective equipment for 24 hours after application, and appropriate actions to take in case of accidental exposure, as described under Statement of Practical Treatment in the Precautionary Statements on this label. When oral warnings are given, warning 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: CAUTION. Area treated with **Diazinon 40W** on (date of application). Do not enter without appropriate personal protective equipment for 24 hours after application. In case of accidental exposure, flush eyes or skin with plenty of water. Call physician if irritation persists. Remove and wash contaminated clothing before reuse.

Note: The California Department of Agriculture has set a 5-day reentry period for diazinon on grapes, peaches, and nectarines. Five days should elapse between the time of application and the time a worker may enter the field to engage in any activity requiring substantial contact with treated

foliage. When a mixture of two or more organophosphate pesticides are applied in combination, the interval should be prolonged by adding to the largest applicable interval an additional 50% of that interval.

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

CHEMIGATION

APPLICATION THROUGH AN IRRIGATION SYSTEM (CHEMIGATION) - CRANBERRIES ONLY.

Diazinon 40W may be applied alone or in combination with other pesticides registered for application through sprinkler irrigation systems to cranberries. To insure compatibility, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is compatible.

Do not apply this product through any type of irrigation system to other crops. For chemigation, apply this product to cranberries only through sprinkler irrigation systems. Do not apply this product to cranberries through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect the irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments if the need arises.

Chemigation System Connected to Public Water Systems

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

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

Sprinkler Chemigation

1. The system must contain a functional check valve, a vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent 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 **Diazinon 40W** needed to treat the acreage to be treated. Refer to the specific directions for use for cranberries for the application rate and the amount of water per acre.
3. Add the pre-measured **Diazinon 40W** to the chemigation system supply tank and dilute with water if needed. Proper agitation is needed if **Diazinon 40W** is tank mixed with other pesticides registered for sprinkler chemigation application to cranberries.
4. Start the irrigation system and bring the system up to full pressure, making certain that all sprinkler heads are functioning properly.

- 5. Engage the chemigation injection or venturi system to add the diazinon to the irrigation lines.
- 6. Continue to run irrigation system for a few minutes after supply tank is empty to allow material in the irrigation lines to reach the sprinkler heads further from the chemigation injection point.

FRUIT AND NUT CROPS

Diazinon 40W may be applied using ground or aerial application equipment as specified in the following Table. This Table indicates the *minimum* amount of water that can be used for various methods of application. The rate of **Diazinon 40W** for aerial spray or concentrated spray applied by ground equipment is based on a dilute full cover spray applied to fruit or nut trees with conventional ground equipment at a rate of 300-400 gals. of water per acre. The specific amount of product to be used appears under separate directions for use for each crop. (Note: "lbs." or "lbs. of product" in the direction means pounds of this product, not pounds of active ingredient). If the Rate calls for 1 lb. of **Diazinon 40W** per 100 gallons of water, this amounts to 3¾-4 lbs. of product per acre when applied to fruit trees at the usual dilute ground spray volumes of 300-400 gals. 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 Minimum Gals./Acre	Ground Application Minimum Gals./Acre	
		Dilute	Concentrate
Almonds*	20	100	20
Apples	20	100	20
Apricots	20	100	20
Blackberries**	20	100	20
Boysenberries**	20	100	20
Cherries	20	100	20
Cranberries	20	15	-
Dewberries**	20	100	20
Grapes	20	100	20
Loganberries**	20	100	20
Nectarines	20	100	20
Peaches	20	100	20

Pears	20	100	20
Pineapple	20	200	-
Plums	20	100	20
Prunes	20	100	20
Raspberries**	20	100	20
Strawberries	20	100	20
Walnuts*	20	100	20

*CA only.

**CA, OR, or WA only.

Observe stated time intervals between last application and harvest, as well as intervals between applications and total amount of product that can be applied per season:

Crop	PHI*
Almonds	**
Apples	21
Apricots	21
Blackberries	7
Boysenberries	7
Cherries	21
Cranberries	7
Dewberries	7

Grapes	28
Loganberries	7
Nectarines	21
Peaches	21
Pears	21
Pineapple	7
Plums, Prunes	21
Raspberries	7
Strawberries	5
Walnuts	45

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

** = Dormant spray only.

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

ALMONDS (CA only): San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs - 1¼-1¾ lbs. + 2-3 gallons dormant oil or 1-1½ gallons superior type oil in 100 gallons of water. Apply as a single dormant spray. Do not apply more than 6 lbs. of diazinon or 9 gallons of oil per acre.

APPLES: San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs - 1¼ lb. + 2 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water. Apply as a dormant or delayed dormant spray. Do not apply more than 4 lbs. of product or 6 gals. of oil per acre. **Leafhopper** - 1¼ lb. in 100 gals. of water. Apply, beginning at petal fall, as infestations develop. Repeat application in 14 days if necessary. **Eyespotted Bud Moths, Fruit Tree Leafrollers, Mealybugs** - 1¼ lb. in 100 gals. of water. Make 3 cover spray 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 russeting may occur on some varieties of apples such as Golden Delicious. **Apple Maggots** - 1¼ lb. in 100 gals. of water. Make 3 cover sprays when flies are active and laying eggs. Do not repeat applications closer than 14 days. Note: Diazinon may not control organophosphate-resistant apple maggots. **San Jose Scale**

Crawlers, Forbes Scale Crawlers: 1¼ lb. in 100 gals. of water. 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 5 lbs. of product per acre per application and no more than 15 lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

APRICOTS: San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs - 1¼ lb. = 2 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water. Apply as a dormant spray. Do not apply more than 5 lbs. of product or 6 gals. of oil per acre. **Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers** - 1¼ lb. in 100 gallons of water. Apply as infestations occur. Repeat application after 14 days if necessary. **Olive Scale Crawlers** - 2/3 lb. + 1½ gallons of light medium horticultural oil per 100 gals. of water. Apply when scale crawlers are present. Do not apply more than 5 lbs. of product or 6 gals. of oil per acre per application. **Apricot Mealybugs** - 1¼ lb. per 100 gallons of water. Apply as a cover spray from petal fall to June. Allow 14 days between applications.

Notes: (1) Do not apply more than 5 lbs. of product per acre per application and no more than 15 lbs. of product per acre per season. (2) To avoid illegal residues allow a minimum of 21 days between the last application and harvest.

CANEBERRIES (CA, OR and WA only) (Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries): Leafhoppers, Thrips, Aphids, Two-spotted Spider Mites, Raspberry Fruitworms - 2½ lbs. per acre in a minimum of 100 gals. of water (200 gals. of water maximum). Apply as insects occur. Repeat applications 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** - 2½-5 lbs. per acre in a minimum of 100 gals. of water. Apply as a dormant spray in the early Spring when canes are still on the ground and buds are closed. Make a second application when buds are well developed but still closed. **Raspberry Crown Borers (Raspberry Root Borers)** - 5 lbs. per acre in a minimum of 100 gals. of water. Apply as a drench to the crown and lower canes in the Spring before buds break.

CHERRIES: San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs - 1½ lbs. + 3 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water. Apply as a dormant spray. Do not apply more than 5 lbs. of product or 6 gals. of oil per acre. **Eyespotted Bud Moths, Fruit Tree Leafrollers** - 1¼ lb. in 100 gallons of water. Apply as infestations occur beginning at petal fall. Repeat application after 7 days if necessary. **Leafhoppers** - 1¼ lb. in 100 gallons of water. Make 3-4 applications beginning at petal fall and continuing through the growing season as infestations occur. Allow 7 days between applications. **Cherry Fruitflies** - 2/3-1¼ lb. in 100 gallons of water. Make 3-4 applications beginning when adult flies begin to emerge and repeating at 10 day intervals. **Black Cherry Aphids** - 1¼ lb. in 100 gallons of water. Apply as a cover spray when aphids appear. Repeat application after 10

days if necessary. **San Jose Scale Crawlers** - 1¼ lb. in 100 gallons of water. Apply during the pre-pink stage or when crawlers first appear. **Cherry Rust Mites** - 2/3-1¼ lb. in 100 gallons of water. Apply as a single supplemental spray to trees after harvest.

Notes: (1) Do not apply more than 5 pts. of product per acre per application and no more than 15 pts. of product per acre per season. (2) Allow a minimum of 21 days between the last application and harvest.

CRANBERRIES: Blackheaded Fireworms (*Rhopobota naevana*) - 5 lbs. in a minimum of 15 gals. of water per acre for ground application and up to 400 gals. of water per acre for chemigation. Apply when pest appears. Repeat application after 14 days if necessary. A maximum of 6 applications per season is permitted. **Cranberry Fruitworms** - 7½ lbs. in a minimum of 15 gals. of water per acre for ground application and up to 400 gals. of water per acre for chemigation. Apply when pest appears. Repeat application after 14 days if necessary. A maximum of 4 applications per season is permitted.

Note: (1) This product may be applied to cranberries through sprinkler irrigation. Refer to the Chemigation section for specific chemigation directions for use. (2) To avoid illegal residues, allow a minimum of 7 days between the last application and harvest.

GRAPES: Pacific Spider Mites, Leafhoppers, Grape Berry Moths, Grape Leafrollers, Omnivorous Leafrollers, Aphids, Spider Mites - 1¼-2½ lbs. per acre in a minimum of 100 gals. of water. (200 gals. of water maximum). Apply as a thorough cover spray when pest appear. Repeat application after 7 days if necessary. ***Drosophila* spp.** - 7½ oz. per acre in a minimum of 100 gallons of water (300 gal. of water maximum). Apply as a thorough cover spray at 7 day intervals.

Notes: (1) Do not apply more than 2½ lbs. of product per acre per application and no more than 10 lbs. per acre per season. (2) To avoid illegal residues, allow 28 days between the last application and harvest.

NECTARINES: San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, European Red Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs - 1¼ lb.+ 2-3 gals. of dormant oil or 1-1½ gals. superior type oil in 100 gals. of water. Apply as a dormant spray. Do not apply more than 5 lbs. of product or 6 gals. of oil per acre. **Aphids, Brown Mites (Clover Mites), Two-spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers** - 1¼ lb. in 100 gallons of water. Apply as infestations occur. Repeat application after 7 days if necessary. **Peach Twig Borers, Parlatoria Scale** - 1¼ lb. - 1 gal. light medium summer horticultural oil in 100 gals. of water. Apply at petal fall. Do not apply more than 5 lbs. of product or 4 gals. of oil per acre. **Olive Scale Crawlers** - 2/3 lb. in 100 gallons of water. Apply as infestations occur. Repeat application after 7 days if necessary. **European Red Mite Eggs** - 1 lb. in 100 gallons of water. Apply as infestations occur. Repeat application after 7 days if necessary. **Blackheaded Fireworms** - 5 lbs. in a minimum of 15 gals. of water per acre for ground application and up to 400 gals. of water per acre for chemigation. Apply when pest appears. Repeat application after 14 days if necessary. A maximum of 6 applications per season is permitted. **Cranberry Fruitworms** - 7½ lbs. in a minimum of 15 gals. of water per acre for ground application and up to 400 gals. of water per acre for chemigation. Apply when pest appears. Repeat application after 14 days if necessary. A maximum of 4 applications per season is permitted.

from summer horticultural oil in 100 gals. of water. Apply at petal fall. Do not apply more than 5 lbs. of product or 4 gals. of summer oil per acre. **Olive Scale Crawlers** - $\frac{2}{3}$ + $1\frac{1}{2}$ gals. light medium horticultural oil in 100 gals. of water. Apply as insects occur. Do not apply more than 5 lbs. of product or 4 gals. of summer oil per acre per application. Allow 7 days between applications. **Oriental Fruitmoths** - $\frac{1}{4}$ lb. in 100 gallons of water. Apply at 100% petal fall. Make 2 additional applications at 10-15 day intervals. Time the last application to peak adult flight. **Peach Twig Borers** - $\frac{1}{4}$ lb. in 100 gals. of water. Apply as insects occur in May and June. Allow 7 days between applications. **Leafhoppers** - $\frac{1}{4}$ lb. in 100 gallons of water. Make 3-4 applications beginning at petal fall and continuing through the growing season. Allow at least 7 days between applications. **White Peach Scale** - $1\frac{3}{4}$ - $2\frac{1}{2}$ lbs. in 100 gallons of water. Apply post-harvest timed to coincide with peak crawler and immature scale activity. Under conditions of heavy infestation, 2 applications (7 days apart) may be needed.

Notes: (1) Do not apply more than 5 lbs. of product per acre per application and no more than 15 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: San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Pear Leaf Blister Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, mealy Plum Aphid Eggs, Mealybugs - $\frac{1}{4}$ lb. + 2-3 gals. dormant oil or 1- $\frac{1}{2}$ gals. superior type oil in 100 gals. of water. Apply as a dormant spray. Do not apply more than 5 lbs. of product or 6 gals. of oil per acre. **Pear Psylla** - $\frac{2}{3}$ - $1\frac{1}{4}$ lb. in 100 gals. of water. Apply as a cover spray at pre-pink stage. Make 1-2 additional applications during the first and second cover sprays, if necessary. Allow at least 14 days between applications. **Tentiform Leafminers, Mealybugs** - $\frac{1}{4}$ lb. in 100 gals. of water. Make 3 cover sprays, beginning in April. Allow at least 14 days between applications. **Codling Moths, Rosy Apple Aphids, Green Apple Aphids, Woolly Apple Aphids, Spider Mites** - $\frac{1}{4}$ lb. in 100 gals. of water. Make 3 cover sprays beginning as infestations occur. Allow at least 14 days between applications. **Note:** Mites will be suppressed if diazinon is used in this regular cover spray program. **Apple Maggots** - $\frac{1}{4}$ lb. in 100 gals. of water. Make 3 cover sprays when flies are active and laying eggs. Allow at least 14 days between applications. **Note:** Diazinon will not control organophosphate-resistant apple maggot. **San Jose Scale Crawlers, Forbes Scale Crawlers** - $\frac{1}{4}$ lb. in 100 gals. of water. 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 5 lbs. of product per acre per application and no more than 15

lbs. of product per acre per season. (2) To avoid illegal residues, allow a minimum of 21 days between the last application and harvest.

PINEAPPLE: Pineapple Mealybugs - 2½ lbs. per acre in 200-500 gals. of water. 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. Pineapple forage and refuse may not be fed to livestock.

PLUMS: San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs - 1¼ lb. + 2-3 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water. Apply as a dormant spray. Do not apply more than 5 lbs. of product or 6 gals. of oil per acre. If applied in late April or May, mix diazinon with 1 gal. of light medium summer horticultural oil per 100 gals. of water. **Brown Mites (Clover Mites), European Red Mites** - 1¼ lbs. in 100 gallons of water. Apply as needed every 7 days. **Leafcurl Plum Aphids, Mealy Plum Aphids, Thistle Aphids** - 2/3-1¼ lbs. in 100 gallons of water. Apply as needed every 7 days.

Notes: (1) Do not apply more than 5 lbs. of product per acre per application and no more than 15 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: San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite Eggs, Brown Mite Eggs, Twig Borers, Apple Aphid Eggs, Black Cherry Aphid Eggs, Mealy Plum Aphid Eggs, Mealybugs - 1¼ lb. + 2-3 gals. dormant oil or 1-1½ gals. superior type oil in 100 gals. of water. 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 diazinon with 1 gal. of light medium summer horticultural oil per 100 gals. of water. **Brown Mites, Clover Mites, European Red Mites** - 1¼ lb. in 100 gallons of water. Apply as needed every 7 days. **Leafcurl Plum Aphids, Mealy Plum Aphids, Thistle Aphids** - 2/3-1¼ lb. in 100 gallons of water. Apply as needed every 7 days.

Notes: (1) Do not apply more than 5 lbs. of product per acre per application and no more than 15 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 - 1¼ lb. in 100 gallons of water per acre. Apply as pests occur. Repeat application if necessary every 7 days. **Cyclamen Mites** - 2½ lbs. in 100 gallons of water per acre. Direct spray to the plant crowns. Plants should be sufficiently agitated to assure thorough coverage of the foliage. Repeat applications after 7 days if necessary. **Mole Crickets** - 2½ lbs. per acre. Apply 1-2 days before transplanting and immediately incorporate into the top 1-2 inches of soil. **Strawberry Leafrollers** - 1-1¼ lbs. in 100 gallons of water. Apply 200 gallons 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 2½ lbs. of product per acre per application and no more than 10 lbs. of product per acre per season. (3)

Allow a minimum of 5 days between the last application and harvest.

WALNUTS (CA only): Aphids, Spider Mites - 2½ lbs. per acre in 100 gals. of water per acre.. 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** - 7½ lbs. per acre in 100 gals. of water per acre.. Apply as a foliar spray. Repeat application in 14 days if necessary. Do not make more than 3 applications per season. Do not apply within 45 days of harvest or after husks open or illegal residues may occur.

VEGETABLE CROPS

For foliar or soil applications, **Diazinon 40W** should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. **Diazinon 40W** 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./Acre
	Minimum Gals./Acre	OR Minimum Gals./1,000 Sq.Ft.	
Beans, Lima, Snap, and Pole (succu- lend only)	10	2	5
Beets, Red (Table)	10	2	5
Broccoli	10	2	5
Brussels Sprouts	10	2	5
Cabbage	10	2	5
Cantaloupes	5	1	5
Carrots	10	2	5
Casabas	5	1	5
Cauliflower	10	2	5
Chinese Broccoli	10	2	5
Chinese Cabbage	10	2	5
Chinese Mustard	10	2	5
Collards	10	2	5
Crenshaws	5	1	5
Cucumbers	5	1	5
Endive (Escarole)	10	2	5
Honeydew Melons	5	1	5
Kale	10	2	5
Lettuce, Head	10	2	5
Lettuce, Leaf	10	2	5
Muskmelons	5	1	5
Mustard	10	2	5
Onions, (Bulb and Green)	10	2	5
Parsley	10	2	5

(cont'd) Crop	Ground Application		Aerial Application Minimum Gals./Acre
	Minimum Gals./Acre	OR Minimum Gals./1,000 Sq.Ft.	
Parsnips	10	2	5
Peas (succulent)	10	2	5
Peppers	10	2	5
Persian Melons	5	1	5
Potatoes (Irish)*	10	2	5
Radishes	10	2	5
Spinach	10	2	5-
Squash, Summer	5	1	5
Squash, Winter	5	1	5
Sweet Corn	20	4	5
Sweet Potatoes	10	2	5
Swiss Chard	10	2	5
Tomatoes	10	2	5
Turnips	10	2	5
Watermelons	5	1	5

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

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 (Days)
Beans, (Lima, Snap, Pole)	7
Beets, Red (Table)	14
Broccoli	7
Brussels Sprouts	7
Cabbage	21
Cantaloupes	3
Carrots	14
Casabas	3
Cauliflower	7
Chinese Broccoli	10
Chinese Cabbage	10
Chinese Mustard	10
Collards	10
Crenshaws	3
Cucumbers	7
Endive (Escarole)	14
Ginseng	30
Honeydew Melons	3
Kale	10

Lettuce (Head and Leaf)	14
Muskmelons	3
Mustard	10
Onions (Green and Bulb)	14
Parsnips	14
Peas	7
Peppers	5
Persian Melons	3
Potatoes (Irish)	35
Radishes	14
Spinach	14
Squash, Summer	7
Squash, Winter	3
Sweet Corn	7
Swiss Chard	14
Tomatoes	1
Turnips (Roots and Tops)	14
Watermelons	3

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

Notes: 1) **Soil Incorporation:** Following application of this product to control vegetable soil insects, immediately incorporate the product into the soil to the recommended depth (see TIMING/SPECIAL DIRECTIONS) using a rotary hoe, cultivator, disk, harrow, or other suitable means. For control of surface cutworms, incorporate 2-3 inches; for subterranean cutworms, incorporate 3-6 inches. 2) **To Protect Bees:** Foliar applications of this product should not be made to peas or beans if these crops or weeds in the treatment area are in bloom, or to corn during the pollen shed period.

BEANS (Lima, Pole, Snap -succulent only): **Cutworms** - 5-10 lbs. per acre or 2-3¼ oz. per 1,000 sq. ft.. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Wireworms** - 7½-10 lbs. per acre or 2¼-3¼ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Black Bean Aphids, Mexican Bean Beetles, Dipterous Leafminers** - 1¼-1¾ lbs. per acre or ½-¾ oz. per 1,000 sq. ft. 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 gallons of water per acre.

NOTE: Diazinon will not control organophosphate-resistant leafminers. **Cucumber Beetles** - 2/3-1 lb. per acre or 1/25-¼ oz. per 1,000 sq. ft. 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 gallons of water per acre. **NOTE:** Diazinon will not control organophosphate-resistant leafminers. **Leafhoppers, Spider Mites** - 1¼ lb. per acre or ½ oz. per 1,000 sq. ft. 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** - 5-10 lbs. per acre or 2-3 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2 $\frac{1}{2}$ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7 $\frac{1}{2}$ -10 lbs. per acre or 2 $\frac{3}{4}$ -3 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Dipterous Leafminers** - 2/3-1 $\frac{1}{4}$ lb. per acre or $\frac{1}{4}$ - $\frac{1}{2}$ oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

BROCCOLI: **Root Maggots** - 5-7 $\frac{1}{2}$ lbs. per acre or 1 $\frac{3}{4}$ -2 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting or transplanting and immediately incorporate into the top 3-4 inches of soil. **Root Maggots** - 5-10 ozs. per 50 gals. of water. In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 2/3-1 $\frac{1}{4}$ cup (5 to 10 oz.) per plant by hand or by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. **NOTE:** Transplant water treatments may result in stand reduction due to plant stress at time of transplanting. **Cutworms** - 5-10 lbs. per acre or 2-3 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2 $\frac{1}{2}$ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7 $\frac{1}{2}$ -10 lbs. per acre or 2 $\frac{3}{4}$ -3 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers** - 2/3-1 $\frac{1}{4}$ lb. per acre or $\frac{1}{4}$ - $\frac{1}{2}$ oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

BRUSSELS SPROUTS: **Root Maggots** - 5-7 $\frac{1}{2}$ lbs. per acre or 1 $\frac{3}{4}$ -3 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting or transplanting and immediately incorporate into the top 3-4 inches of soil. **Root Maggots** - 5-7 $\frac{1}{2}$ in 50 gals. of water. In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 2/3-1 $\frac{1}{4}$ cup (5 to 10 oz.) per plant by hand or by tractor-mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. **NOTE:** Transplant water treatments may result in stand reduction due to plant stress at time of transplanting. **Cutworms** - 5-10 lbs. per acre or 1 $\frac{3}{4}$ -3 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2 $\frac{1}{2}$ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7 $\frac{1}{2}$ -10 lbs. per acre or 2 $\frac{3}{4}$ -3 $\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into

the top 4-8 inches of soil. **Aphids, Diamondback Moths, Imported Cabbageworms**, - 2/3-1 1/4 lb. per acre or 1/4-1/2 oz. per 1,000 sq ft. Apply as insects occur. Repeat application as necessary, up to five times, with a minimum of 7 days between applications. Do not apply within 7 days of harvest or illegal residues may occur.

CABBAGE: Root Maggots - 5-7 1/2 lbs. per acre or 1 3/4-2 3/4 oz. per 1,000 sq. ft. Broadcast just before planting or transplanting and immediately incorporate into the top 3-4 inches of soil. **Root Maggots** - 5-10 oz. in 50 gals. of water. In transplant water as a drench application when 200-300 gals. of water are used per acre. Apply 2/3-1 1/4 cup (5 to 10 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** - 5-10 lbs. per acre or 1 3/4-3 3/4 oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2 1/2 lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7 1/2-10 lbs. per acre or 2 3/4-3 3/4 oz. per 1,000 sq ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers** - 2/3-1 1/4 lb. per acre or 1/4-1/2 oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

CARROTS: Cutworms - 5-10 lbs. per acre or 1 3/4-3 3/4 oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2 1/2 lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7 1/2-10 lbs. per acre or 2 3/4-3 3/4 oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Carrot Rust Fly** - 5 lbs. per acre or 1 3/4 oz. per 1,000 sq. ft. Apply as a drench to the seed furrow at planting. **Aphids** - 1 1/4 lb. per acre. or 1/2 oz. per 1,000 sq. ft. 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.

CAULIFLOWER: Root Maggots - 5-7 1/2 lbs. per acre or 1 3/4-3 3/4 oz. per 1,000 sq. ft. Broadcast just before planting or transplanting and immediately incorporate into the top 3-4 inches of soil. **Root Maggots** - 5-10 ozs. in 50 gals. of water. In transplant water as a drench application where 200-300 gals. of water are used per acre. Apply 2/3-1 1/4 cup (5 to 10 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** - 5-10 lbs. per acre or 1 3/4-3 3/4 oz. per 1,000 sq. ft.. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2 1/2 lbs. per acre or 1 oz. per 1,000 sq. ft. . Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7 1/2-10 lbs. per acre or 2 3/4-3 3/4 oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers** - 2/3-1 1/4 lb. per acre or 1/4-1/2 oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

CHINESE BROCCOLI, CHINESE CABBAGE (BOK CHOY AND NAPA), CHINESE MUSTARD (GAI CHOY): Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leafminers - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. 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. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

COLLARDS: Cutworms - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) Mole Crickets - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before planting and immediately incorporate into the top 1-2 inches of soil. Wireworms - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. Aphids, Diamondback Moths, Imported Cabbageworms, Harlequin Cabbagebugs, Corn Earworms - 2/3-1¼ lb per acre or ¼-½ oz. per 1,000 sq. ft. 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.

CUCUMBERS: Cutworms - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) Wireworms - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. Aphids, Serpentine Leafminers, Thrips, Striped Cucumber Beetles, Melonworm - 1¼ lb. per acre or ¼ oz. per 1,000 sq. ft. Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 7 days of harvest or illegal residues may occur. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

ENDIVE (ESCAROLE): Cutworms - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) Mole Crickets - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. Wireworms - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. Aphids, Dipterous Leafminers - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. Apply as insects occur. Repeat application, as necessary, up to 5 time with a minimum of 7 days between applications. Do not apply within 14 days of harvest. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

KALE: Cutworm - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) Mole Crickets - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches

of soil. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Diamondback Moths, Imported Cabbageworms, Harlequin Cabbagebugs, Corn Earworms** - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. Apply as insects occur. Repeat application, as necessary, up to 5 times, a minimum of 7 days between applications. Do not apply within 14 days of harvest or illegal residues may occur.

LETTUCE (Head and Leaf): Cutworms - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Dipterous Leafminers** - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

MELONS (CANTALOUPE, CASABAS, CRENSHAW, HONEYDEW, MUSKMELON, PERSIAN, AND HYBRIDS OF THESE) AND WATERMELONS: **Cutworms** - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Dipterous Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites** - 2/3-3¾ lbs. per acre or ¼-¾ oz. per 1,000 sq. ft. Apply as insects occur. Repeat application, as necessary, up to 5 times with a minimum of 7 days between applications. Do not apply within 3 days of harvest or illegal residues may occur. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

MUSTARD: **Mole Crickets** - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Dipterous Leafminers, Diamondback Moths, Imported Cabbageworms** - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. 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. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

ONION (GREEN & BULB): Onion Maggots - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and mix into the top 3-4 inches of soil. **NOTE:** Diazinon will not control organophosphate-resistant onion maggots. **Onion Thrips** - 1¼ lb. per acre or ½ oz. per 1,000 sq. ft. Apply as thrips appear. Repeat application, as necessary, every 7 days. Do not make more than 3 applications per season. Do not apply within 14 days of harvest or illegal residues may occur. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into top 4-8 inches of soil.

PARSLEY: Cutworms - 5-10 lbs. per acre or $1\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Wireworms** - $7\frac{1}{2}$ -10 lbs. per acre or $2\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into top 4-8 inches of soil.

PARSNIPS: Aphids, Flea Beetles, Dipterous Leafminers - $\frac{2}{3}$ - $1\frac{1}{4}$ lb. per acre or $\frac{1}{4}$ - $\frac{1}{2}$ oz. per 1,000 sq. ft. Apply as insects occur. Repeat application, as necessary, up to 5 times, with a minimum of 7 days per application. Do not apply within 14 days of harvest or illegal residues may occur. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

PEAS (SUCCULENT ONLY): Cutworms - 5-10 lbs. per acre or $1\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Wireworms** - $7\frac{1}{2}$ -10 lbs. per acre or $2\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil (See Soil Incorporation Note). **Aphids, Dipterous Leafminers** - $1\frac{1}{4}$ lb. per acre or $\frac{1}{3}$ - $\frac{1}{2}$ oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

PEPPERS: Cutworms - 5-10 lbs. per acre or $1\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - $2\frac{1}{2}$ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - $7\frac{1}{2}$ -10 lbs. per acre or $2\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Serpentine Leafminers** - $\frac{2}{3}$ - $1\frac{1}{4}$ lb. per acre or $\frac{1}{4}$ oz. per 1,000 sq. ft. Apply as insects appear. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 5 days of harvest or illegal residues may occur. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

POTATOES: Cutworms (Surface & Subterranean) - 5-10 lbs. per acre or $1\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Southern Potato Wireworms (Southeastern U.S.)** - 5-10 lbs. per acre or $1\frac{3}{4}$ - $3\frac{3}{4}$ oz. per 1,000 sq. ft. For potatoes grown on mineral soils in the Southeast, apply prior to planting and immediately incorporate into the top 3-6 inches of soil depending on location of wireworms. **Aphids, Flea Beetles, Colorado Potato Beetles, Dipterous Leafminers** - $\frac{2}{3}$ -1 lb. per acre or $\frac{1}{4}$ - $\frac{1}{3}$ oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers. **Banded Cucumber Beetles, Leafhoppers, Southern Armyworms** - $1\frac{1}{4}$ lb. per acre or $\frac{1}{3}$ - $\frac{1}{2}$ oz. per 1,000 sq. ft. 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** - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾oz. per 1,000 sq. ft. Broadcast before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Flea Beetles, Dipterous Leafminers** - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft.. 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:** Diazinon will not control organophosphate-resistant leafminers.

SPINACH: **Aphids, Dipterous Leafminers** - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

SQUASH, SUMMER: **Cutworms** - 5-10 lbs. per acre or 2-3¾oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Wireworms** - 7½-10 lbs. per acre 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites** - 2/3-1¼ lbs. per acre or ¼-1/3 oz. per 1,000 sq. ft. Apply as insects occur. Repeat application, as necessary, every 7 days. Do not make more than 5 applications per season. Do not apply within 7 days of harvest or illegal residues may occur. **NOTE:** Diazinon will not control organophosphate-resistant leafminers.

SQUASH, WINTER: **Cutworms** - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft.. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Leafminers, Thrips, Striped Cucumber Beetles, Melonworms, Leafhoppers, Spider Mites** - 2/3-1¼ lbs. per acre or ¼-1/3 oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

SWEET CORN: **Cutworms** 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Seed Corn Maggots** - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 2 inches of soil. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast before planting and immediately incorporate into the top 4-8 inches of soil. **Corn Earworms** - 2½-3 lbs. per acre or 1-1¼ oz. per 1,000 sq. ft. Apply when silks first appear. Repeat application every 7 days up to a maximum of 5 applications, if necessary. **Corn Leaf Aphids** - 1¼-2½ lbs. per acre or ½-1 oz. per 1,000 sq. ft. Apply in sufficient water to provide complete coverage to the upper portions of the plants. Repeat in 7 days, if necessary. Do not make more than 5 applications per season. **Grasshoppers, Spider Mites, Flea Beetles** - 1¼ lb. per acre or

½ oz. per 1,000 sq. ft. Apply as insects occur. Repeat if necessary, but do not make more than 5 applications per season. **Sap Beetles** - 2½-3 lbs. per acre or 1-1¼ oz. per 1,000 sq. ft. Consult local agricultural authorities for proper timing of sprays. Repeat application in 7 days, if necessary. Do not make more than 5 applications per season.

NOTE: (1) To protect bees, do not apply foliarly to corn during the pollen shed period. (2) Allow 7 days after the last application before grazing or cutting for forage. Forage may be fed to beef and airy cattle and sheep. (3) Corn may be picked 7 days after the last application.

SWEET POTATOES: Wireworms, Flea Beetles - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.

SWISS CHARD: Cutworms - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Corn Earworms, Imported Cabbageworms, Diamondback Moths, Harlequin Cabbagebugs** - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. 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 - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Dipterous Leafminers** - 2/3 lb. per acre or ¼ oz. per 1,000 sq. ft. Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within one day of harvest or illegal residues may occur. **Note:** Diazinon will not control organophosphate-resistant leafminers. **Banded Cucumber Beetles, Fall Armyworms, Southern Armyworms, Beet Armyworms** - 1-1¼ lb. per acre or 1/3-½ oz. per 1,000 sq. ft. Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within one day of harvest or illegal residues may occur. **Note:** Diazinon will not control organophosphate-resistant leafminers. **Vinegar Flies (*Drosophila Spp.*)** 1/3-1¾ lbs. per acre or ¼-¾ oz. per 1,000 sq. ft. Apply as insects appear. Repeat application after 7 days, if necessary. Do not make more than 5 applications per season. Do not apply within one day of harvest or illegal residues may occur. **Note:** Diazinon will not control organophosphate-resistant leafminers.

TURNIPS (ROOTS AND TOPS): Cutworms - 5-10 lbs. per acre or 1¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the soil. (See Soil Incorporation Note.) **Mole Crickets** - 2½ lbs. per acre or 1 oz. per 1,000 sq. ft. Apply to plant beds or fields 1-2 days before sowing of seed or transplanting and immediately incorporate into the top 1-2 inches of soil. **Wireworms** - 7½-10 lbs. per acre or 2¾-3¾ oz. per 1,000 sq. ft. Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil. **Aphids, Flea Beetles, Dipterous Leafminers** - 2/3-1¼ lb. per acre or ¼-½ oz. per 1,000 sq. ft. 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:** Diazinon will not control organophosphate-resistant leafminers.

MUSHROOM HOUSES

Mushroom flies (Phorida and Sciarids) - Mix 5-6¼ lbs. of **Diazinon 40W** 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 by burial away from bodies of water.

Note: (1) If seed has not been treated with a fungicide, use an EPA-registered fungicide combination with **Diazinon 40W** 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 plant, ½ oz. 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 for or mixed with food or animal feed or processed for oil.

CORN: Seedcorn Beetle - Mix 3¾ oz. per bushel of seed.

CORN, SUCCULENT PEAS AND SUCCULENT BEANS: Seedcorn Maggot - Mix 2/3 oz. per bushel of seed.

FIELD CROPS

Apply soil and foliar applications of **Diazinon 40W** 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 application that can be made per season.

Preharvest Interval (PHI*) for Foliar Applications

Crop	PHI (Days)
Hops	14
Sugar Beets	14

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

HOPS: Aphids, Spider Mites - 2½ lbs. per acre. Apply as pest occur. Repeat application, 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 - 7½-10 lbs. per acre. Broadcast just before planting. Incorporate into soil 4-6 inches. Do not apply more than 8 lbs. of this product to the soil, per season. **Beef Leafhoppers, Dipterous Leafminers, Aphids** - 1-1¼ lb. per acre. Apply as insects occur. Repeat applications, 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:** Diazinon will not control organophosphate-resistant leafminers. **Grasshoppers** - 1¼ lb. per acre. 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: Tops may be fed to beef and dairy animals.

GRASSLAND INSECTS

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

Grasshoppers: Apply 1-1¼ lb. 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 2/3 lb. in 100 gals. of water, and apply at the rate of 1 gal. per animal.

Low gallonage, low pressure spray: Mix 1¼ lb. in 100 gals. of water. Apply at the rate of 1 qt. per animal.

Sprinkler Can: Mix 1¼ oz. in 6 gals. of water. Crowd 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.

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 four hours. Mix 2½ lbs. of **Diazinon 40W** in 25 gals. 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 5 lbs. in 25 gals. of water. Applications should be made to point of runoff. 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 **Diazinon 40W** with 1 lb. of sugar (or 2 cups of syrup

or molasses) for the desired application.

For knapsack or similar type sprayer, mix 2/3 lb. with the sugar in 2½ 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 2½ 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.

INSECT CONTROL ON ORNAMENTALS

To control certain insects on ornamentals, such as Arborvitae, Azalea, Birch, Boxwood, Camellia, Carnation, Chrysanthemum, Douglas Fir, Elm Gladioli, Hawthorn, Holly, Juniper, Lilac, Locust, Maple, Oak, Pine, Ornamental Plum, Poplar, Rhododendron, Rose, Spruce, and Willow, apply the recommended rates indicated below. Try to spray underside of leaves and penetrate dense foliage. **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, Privet Mites, Scale Crawlers (Cottoncushion, Lecanium, Pine Needle, San Jose, Soft), Thrips, Two-spotted Spider Mites, juniper Webworms, and Whiteflies** - Use 2/3 oz. per 3 gallons of water or 1¼ lb. per 100 gallons of water. **Apple-and-Thorn Skeletonizers, Cotoneaster Webworms, Fall Webworms, Hemlock Chermes, Oak Loopers, Obliquebanded Leafrollers, Pear Slugs, and Tent Caterpillars** - Use 1¼ oz. per 3 gallons of water or 3¼ lbs. per 100 gallons of water.

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

Mimosa Webworms: Mix 2/3 oz. in 3 gallons of water (or 1¼ lb. in 100 gallons of water) and apply as a thorough foliar spray when adults first appear. Make a second and third application at 4-5 week intervals.

LAWN PEST CONTROL (EXCLUDING GOLF COURSES AND SOD FARMS)

Precautions: Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Apply this product only as specified on this label. Because of the migratory habits of certain waterfowl, do not apply in Nassau County, New York between November 1 and May 20. Do not exceed maximum permitted label rates, since rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Avoid overlapping of sprays. If waterfowl, i.e., ducks, geese, can be expected to enter the treated area after treatment (except spot treatments), water lawn with at least ¼ inch of water immediately after application, however, stop watering before puddling occurs.

To control pest listed below, apply recommended rates.

Lawn Chinch Bugs - Use 2½-3¼ ozs. in 3 gals. of water per 1,000 square feet. Use higher rate for longer residual control and in turfgrass of dense growth, such as St. Augustine.

Ants, Armyworms, Bermudagrass 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 - Use 3¼ oz. in 3 gallons of water per 1,000 square feet. Spot spray ant hills and wasp ground nest openings. For digger wasps, apply at dusk when wasps are not active. For frit flies, mow grass and water well before treatment, but delay application until grass is dry. Do not apply to animals. For brown dog ticks, spray grass and under shrubbery. **Hyperodes Weevil** - Apply 3¼ ozs. in 3 gallons of water per 1,000. Treat problem areas in mid-April and again in mid-May. **Millipedes** - Use 3¼ oz. in 3 gallons of water per 1,000 square feet. **Rhodesgrass Scales** - Use 3¼ oz. in 3 gallons of water per 1,000 square feet. Apply when crawlers first emerge. **White Grubs (such as Japanese Beetle Larvae, European Chafer, Southern Chafer)** - Apply 3¼ oz. in 3 gallons of water per 1,000 sq. ft. of lawn. Apply any time between late July and early October.

NUISANCE PESTS IN OUTSIDE AREAS: Ants, Boxelder Bugs, Brown Dog Tick, Chiggers, Clover Mites, Cockroaches, Crickets, Earwigs, Fleas, Flies, Millipedes, Sowbugs (Pillbugs), Spiders, Springtails (*Collembola*) - Mix 3¼ oz. in 3 gals. of water and thoroughly spray window and door screens, sills, foundations, porch and patio walls, entranceways, walks, garbage cans, tree trunks, and into cracks and other places where insects can hide. To prevent entry into houses, spray a five-foot band of soil around the house next to the foundation and spray the foundation of the house to a height of 2-3 feet. Repeat application as necessary. Do not apply to animals. Do not treat plants (other than tree trunks) at this nuisance pest rate.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man, or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. The Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income.

The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability, and remedies.