

Diazinon 40W

Reg. trademark of CIBA-GEIGY

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

Diazinon® 40W is a wettable powder.

See side panel for additional precautions.

ACTIVE INGREDIENT:

O,O-diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate..... 40%

INERT INGREDIENTS:..... 60%
TOTAL..... 100%

WARNING KEEP OUT OF REACH OF CHILDREN

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. 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 on to sprayed grass until spray is completely dried.

ENVIRONMENTAL CAUTIONS

This product is toxic to fish, shrimp, crabs and other wildlife. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service.

Do not reuse container. Destroy it by burying or burning. Avoid smoke or fumes.

GENERAL INFORMATION

In the directions for use given below, unless otherwise noted, Diazinon® 40W should be mixed with sufficient water to assure thorough coverage. 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 a set 5-day reentry for Diazinon® on citrus, grapes, peaches and nectarines. Five days should lapse 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 are applied in combination, the interval should be prolonged by adding to the largest applicable interval an additional 50% of that interval.

Since Diazinon® 40W is a wettable powder formulation, constant agitation is necessary during application.

Note: Mites will be suppressed if Diazinon® 40W 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: San Jose Scales, Brown Apricot Scales, Walnut Scales, Apricot Mealybugs: Mix 1 1/2 lb. of Diazinon® 40W plus 2 gals. of dormant oil per 100 gal. of water. Apply as dormant spray. Aphids, Brown Mites (Clover Mites), Two-Spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers: Mix 1 1/2 lb. per 100 gals. of water. Apply when aphids, mites and scale crawlers first appear. Olive Scale Crawlers: Mix 5/8 lb. of Diazinon® 40W plus 1 1/2 gals. of light medium horticultural oil per 100 gals. of water. Apply when scale crawlers are present. Apricot Mealybugs: Mix 1 1/2 lb. per 100 gals. of water. Apply as a cover spray from petal to June. Do not apply within 10 days of harvest.

BLUEBERRIES: Cranberry Fruitworms, Cherry Fruitworms, Blueberry Maggots, Aphids, Thrips, Two-Spotted Mites: Mix 1 1/2 lb. per 100 gals. of water. Apply up to 200 gals. of spray per acre, or apply 2 1/2 lbs. per acre in sufficient water for thorough coverage. Do not apply within 7 days of harvest.

CANEBERRIES (i.e. Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries): Leafhoppers, Thrips, Aphids, Two-Spotted Mites, Raspberry Sawflies: Mix 1 1/2 lb. per 100 gals. of water and apply up to 200 gals. of spray per acre, or apply 2 1/2 lbs. per acre in sufficient water for thorough coverage. Raspberry Fruitworms: Apply at the above rates when blossom buds separate and repeat application immediately before blossoms open. Dryberry Mites: Mix 2 1/2 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 Borers (Raspberry Root Borers): Mix 5 lbs. per 100 to 200 gals. of water and apply as a drench 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: Brown Apricot Scales, San Jose Scales, Black Scales, Black Cherry Aphid eggs, Brown Mite eggs: Mix 1 1/2 lbs. of Diazinon® 40W plus 3 gals. of dormant oil per 100 gals. of water. Apply as a dormant spray. Eye-Spotted Bud Moths, Fruit-Tree Leaf Rollers: Mix 1 1/2 lb. per 100 gals. of water. Apply in cover sprays as necessary, beginning with petal fall. Leafhoppers: Apply 1 1/2 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 Flies: Mix 5/8 - 1 1/4 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 Aphids: Mix 1 1/2 lb. per 100 gals. of water. Apply as a cover spray when aphids appear and repeat after 10 days. San Jose Scale Crawlers: Mix 1 1/2 lb. per 100 gals. of water. Apply during the pre-pink stage or when crawlers first appear. Cherry Rust Mites: Mix 5/8 - 1 1/4 lb. per 100 gals. of water. Apply as a supplemental spray after harvest. Do not

GRAPES: Pacific Spider Mites, Leafhoppers, Grape Berry Moths, Grape Leaf Folded: Mix 1 1/2 lb. per 100 gals. of water and apply as a thorough cover spray, or apply 2 1/2 lbs. per acre in sufficient water for thorough coverage. Do not apply within 18 days of harvest. Drosophila spp: Mix 7 1/2 oz. per 100 gals. of water and apply as a thorough cover spray, or apply maximum of 22 1/2 oz. per acre in sufficient water for thorough coverage when insects first appear. Make additional applications at weekly intervals as necessary. Do not apply within 7 days of harvest. If a spreader-sticker is used, do not apply within 18 days of harvest.

OLIVES: Olive Scales: Mix 1-1 1/4 lb. of Diazinon® 40W plus 1 1/2 gals. of light medium summer horticultural oil per 100 gals. of water. Apply as a cover spray in June or July. Do not apply during bloom to avoid injury to pollinating insects or within 75 days of harvest.

PEACHES AND NECTARINES: San Jose Scales, Brown Apricot Scales, Walnut Scales, Apricot Mealybugs: Mix 1 1/2 lb. of Diazinon® 40W plus 2 gals. of dormant oil per 100 gals. of water. Apply as a dormant spray. Peach Twig Borers, Parlatoria Scales: Mix 1 1/2 lb. of Diazinon® 40W plus 1 gal. of light medium summer horticultural oil per 100 gals. of water. Apply at petal fall. Aphids, Brown Mites (Clover Mites), Two-Spotted Spider Mites, Olive Scale Crawlers, San Jose Scale Crawlers: Mix 1 1/2 lb. per 100 gals. of water. Apply when aphids, mites and scale crawlers first appear. Olive Scale Crawlers: Mix 5/8 lb. of Diazinon® 40W plus 1 1/2 gals. light medium horticultural oil per 100 gals. of water. Apply when scale crawlers are present. Oriental Fruit Moths: Mix 1 1/4 lb. per 100 gals. of water. Apply at petal fall and every 10-14 days thereafter until control is achieved. Peach Twig Borers: Mix 1 1/2 lb. per 100 gals. of water and apply to peaches in May and June. Leafhoppers (Peaches only): Apply 1 1/2 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. White Peach Scale (Peaches only): As a post-harvest spray, apply 1 4/5-2 1/2 lbs. per 100 gals. of water timed to coincide with peak crawler and immature scale activity. Under conditions of heavy infestations, 2 applications may be necessary. Do not apply to peaches within 20 days, or to nectarines within 10 days, of harvest.

PEARS: Pear Leaf Blister Mites, Mealybugs, San Jose Scales, Brown Apricot Scales: Mix 1 1/2 lb. of Diazinon® 40W plus 2 gals. of dormant oil per 100 gals. of water. Apply as a dormant spray. Pear Psylla: Mix 5/8-1 1/4 lb. per 100 gals. of water. Apply as a cover spray at pre-pink stage. Make 1 to 2 additional applications during the first and second cover sprays if necessary. Tentiform Leaf Miners, Mealybugs: Mix 1 1/2 lb. per 100 gals. of water. Apply in 3 cover sprays, beginning in April. Refer also to Apples and Pears above. Do not apply within 14 days of harvest.

PECANS: Aphids, Mites, Pecan Nut Case-Bearers, Walnut Caterpillars: Apply 2 1/2-7 1/2 lbs. per acre as a foliage spray. Do not apply after husks crack.

PLUMS AND PRUNES: Peach Twig Borer, Mealy Plum Aphid eggs, San Jose Scales,

BEANS (Pole Beans, Snap Bean, Lima Beans): Black Bean Aphids, Mexican Bean Beetles, Leaf Miners: Apply 1 1/4-1 4/5 lbs. per acre. Cucumber Beetles: Apply 5/8-1 lb. in 100 gals. of water per acre. Do not apply within 7 days of bean harvest. 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.

LIMA BEANS: Dipterous Leaf Miners, Leafhoppers, Mites: Apply 1 1/2 lb. per acre. Do not apply within 7 days of bean harvest. 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.

BROCCOLI, CABBAGE, AND CAULIFLOWER: Aphids, Diamondback Moths, Imported Cabbageworms, Dipterous Leaf Miners: Apply 5/8-1 1/4 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 Moths, Imported Cabbageworms: Apply 1 1/2 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 1/2 lb. per acre. Do not apply within 10 days of harvest.

CELERY: Aphids, Flea Beetles: Apply 1 1/2 lb. in 100 gals. of water per acre. Dipterous Leaf Miners: Apply 5/8-1 1/4 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 shipped or used. Tops should not be used for feed or food.

COLLARDS, KALE, SWISS CHARD, AND TURNIP TOPS: Aphids, Imported Cabbageworms, Diamondback Moths, Harlequin Cabbage Bugs, Corn Earworms: Apply 5/8-1 1/4 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 Leaf Miners, Thrips: Apply 1 1/2 lb. per acre. Do not apply within 7 days of harvest.

MELONS AND SQUASH (Cantaloupes, Casabas, Crenshaws, Honeydew Melons, Muskmelons, Persian Melons, and hybrids of these; Watermelons and their hybrids; Summer and Winter Squash): Aphids, Leafhoppers, Mites: Apply 1 1/4-1 4/5 lbs. per acre. Serpentine Leaf Miners, Thrips: Apply 5/8-1 1/4 lb. per acre. Do not apply to melons or winter squash within 3 days, or to summer squash within 7 days, of harvest.

ONIONS: Onion Thrips: Apply 1 1/2 lb. per acre. Do not apply within 10 days of harvest.

PEAS: Aphids, Leaf Miners: Apply 1-1 1/4 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 forage is to be cut for hay.

PEPPERS: Aphids, Serpentine Leaf Miners: Apply 5/8 lb. per acre. Do not apply within 5 days of harvest.

CARROT RUST FLIES: Carrots: Apply 5 lbs. per acre as a drench to the seed furrow at planting time.

Cutworms: (Surface and Subterranean)

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

Broadcast 5-10 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 Symphylans (Centipedes):

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

Broadcast 25 lbs. per acre just prior to planting. Work into soil 4-8 inches immediately. This pre-plant treatment will also control cutworms (surface and subterranean), mole crickets, root maggots, and wireworms.

Mole Crickets:

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

Broadcast 2 1/2 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 1/2 lbs. per acre in sufficient water to drench the seed furrow at planting time. Broadcast 5-10 lbs. per acre just prior to planting. Work into soil 3-4 inches immediately.

ROOT MAGGOTS: Broccoli, Brussels Sprouts, Cabbage, and cauliflower: Broadcast Application: Broadcast 5-7 1/2 lbs. per acre and immediately work into the soil 3-4 inches before seeding, either in the seedbed or in the field or before transplanting. Transplant Water (Drench) Application: Mix 1/2-5/8 lb. in 50 gals. of transplant water when 200-300 gals. of water are used per acre. May be applied at the rate of 5/8-1 1/4 cupful per plant, either by hand or by tractor-mounted

ALFALFA AND CLOVER: Spotted Aphids, Yellow Clover Aphids, Pea Leafhoppers, Plant Bug Nymphs, Mites: 1-1 1/4 lb. per acre. Grasshoppers: Apply 1 lb. per acre. Cutworms (Surface Subterranean): Broadcast 5-10 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 (1) may be grazed immediately following application, (2) may be fed green alfalfa clover immediately following cutting, a may be fed hay provided alfalfa or clover not cut for hay 7 days following treatment. Alfalfa Weevil Larvae: For control in spring, apply 2 1/2-3 1/2 lbs. per acre feeding damage to growing tips be evident. Repeat application, if necessary, if damage is already extensive, cut the alfalfa immediately following cutting. Do not apply to dairy and beef animals or sheep for 2 weeks. Do not cut for hay for 10 days following treatment. Do not spray livestock with either air or ground equipment as directed below under Livestock Insecticides. Do not treat during bloom to avoid injury to pollinating insects.

CORN: Corn Rootworm Larvae: Post-emergence Basal Treatment: Apply 1 1/2-3 1/2 lbs. per 1,000 linear feet of corn row in sufficient water to wet base of corn plant and a band of soil next to the plant. Refer to spacing chart for amounts recommended per acre. Cover treated band with 2-3 inch soil using a disk tiller or cult immediately after spraying. Application should be made at the first sign of rootworm larvae. Application should not be made later than June 24 in the Middle Belt or July in the Northern Corn Belt.

SUGGESTED RATES ACCORDING TO ROW SPACING FOR CORN ROOTWORM LARVAE CONTROL

Row spacing	Linear feet of Corn row/acre	Amount of Diazinon® 40W per acre	Postemergence Basal treatment
48"	10,890	17.5-35oz.	
42"	12,435	19.4-38.75 oz.	
40"	13,068	20-40 oz.	
		(1.25-2.5 lbs.)	
38"	13,939	21.9-43.75 oz.	
36"	14,250	22.5-45 oz.	
30"	17,424	27.5-55 oz.	
		(1.9-3.44 lbs.)	
24"	21,780	34.4-68.75 oz.	
20"	26,136	40-80 oz.	
		(2.5-5 lbs.)	
15"	34,848	55-110 oz.	

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

Seed Corn Maggots: Broadcast 5-10 lbs. per acre just prior to planting. Work into soil immediately. Cutworms (Surface Subterranean): Broadcast 5-10 lbs. per

ponds, tidal marshes and estuaries. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service.

Do not reuse container. Destroy it by burying or burning. Avoid smoke or fumes.

GENERAL INFORMATION

In the directions for use given below, unless otherwise noted, Diazinon® 40W should be mixed with sufficient water to assure thorough coverage. 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 a set 5-day reentry for Diazinon® on citrus, grapes, peaches and nectarines. Five days should lapse 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 are applied in combination, the interval should be prolonged by adding to the largest applicable interval an additional 50% of that interval.

Since Diazinon® 40W is a wettable powder formulation, constant agitation is necessary during application.

DIRECTIONS FOR USE

FRUIT AND NUT INSECTS

ALMONDS: Mites, Twig Borers: Apply 1 1/4 - 1 4/5 lbs. per 100 gals. of water. Parlatoria Scales, San Jose Scales: Mix 1 1/4 - 1 4/5 lbs. Diazinon® 40W plus 2 - 3 gals. dormant oil per 100 gals. of water and apply as a dormant oil per 100 gals. of water and apply as a dormant spray. Almond hulls may be fed to livestock.

APPLES: San Jose Scales, Mealybugs, Apple Aphid eggs, European Red Mite eggs, Brown Mite eggs: Mix 1 1/4 lb. of Diazinon® 40W plus 1 gal. of superior type oil or 2 gals. of dormant oil per 100 gals. of water. Apply as a dormant or delayed dormant spray. Eye-Spotted Bud Moths, Fruit-Tree Leaf Rollers, Mealybugs: Mix 1 1/4 lb. per 100 gals. of water. Make 3 to 8 cover spray applications beginning in the pink state. Do not apply within 14 days of harvest.

APPLES AND PEARS: Codling Moths, Rosy Apple Aphids, Green Apple Aphids, Woolly Apple Aphids, Mites: Mix 1 1/4 lb. Diazinon® 40W per 100 gals. of water. Make 3 to 8 cover spray applications, beginning with the first cover. Applications should be timed according to insect infestations. Apple Maggots: Mix 1 1/4 lb. of Diazinon® 40W per 100 gals. of water. Make at least 3 cover spray applications when flies are active and laying eggs. San Jose Scale Crawlers, Forbes Scale Crawlers: Mix 1 1/4 lb. per 100 gals. of water. Apply early in the season when crawlers first appear. If infestation warrants, make a second application 7 to 10 days later. For Codling Moth and Apple Maggot control, apply at petal fall and every 10 - 14 days thereafter until control is achieved.

in sufficient water for thorough coverage. **Raspberry Fruitworms:** Apply at the above rates when blossom buds separate and repeat application immediately before blossoms open. **Dryberry Mites:** Mix 2 1/2 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 Borers (Raspberry Root Borers):** Mix 5 lbs. per 100 to 200 gals. of water and apply as a drench 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: Brown Apricot Scales, San Jose Scales, Black Scales, Black Cherry Aphid eggs, Brown Mite eggs: Mix 1 1/4 lbs. of Diazinon® 40W plus 3 gals. of dormant oil per 100 gals. of water. Apply as a dormant spray. **Eye-Spotted Bud Moths, Fruit-Tree Leaf Rollers:** Mix 1 1/4 lb. per 100 gals. of water. Apply in cover sprays as necessary, beginning with petal fall. **Leafhoppers:** Apply 1 1/4 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 Flies:** Mix 5/8 - 1 1/4 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 Aphids:** Mix 1 1/4 lb. per 100 gals. of water. Apply as a cover spray when aphids appear and repeat after 10 days. **San Jose Scale Crawlers:** Mix 1 1/4 lb. per 100 gals. of water. Apply during the pre-pink stage or when crawlers first appear. **Cherry Rust Mites:** Mix 5/8 - 1 1/4 lb. per 100 gals. of water. Apply as a supplemental spray after harvest. Do not apply within 10 days of harvest.

CRANBERRIES: Black-Headed Fireworms, Sparganothis sulfureana: Apply 5 lbs. in 400 gals. of water per acre. **Cranberry Fruitworms:** Apply 7 1/2 lbs. in 400 gals. of water per acre. Do not apply within 7 days of harvest.

FIGS: Vinegar Flies (*Drosophila* spp.), Dried Fruit Beetles: Apply 1 1/4 lb. per 100 gals. of water. Do not apply within 5 days of harvest.

FILBERTS: Filbert Leaf Rollers, Aphids: Apply 2 1/2 - 5 lbs. in 250 - 400 gals. of water per acre, as a thorough cover spray.

CITRUS FRUITS (Grapefruits, Lemons, Limes, Oranges, Tangelos, Tangerines, Citrus Citron, Kumquats, and hybrids of these): Citrus Aphids, Cottony-Cushion Scale Crawlers, and Soft Scale Crawlers: Apply 5/8-1 1/4 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. **Fruit Tree Leaf Rollers:** Mix 5/8-1 1/4 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 Thrips:** Apply 1 1/4 lb. in 100 gals. of water (maximum 1000 gals. per acre) when thrips first appear. **Citrus Snow Scales:** Apply 1 1/2-2 1/2 lbs. per 100 gals. of water (maximum 1000 gals. per acre) as a post-bloom 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.

medium horticultural oil per 100 gals. of water. Apply when scale crawlers are present. **Oriental Fruit Moths:** Mix 1 1/4 lb. per 100 gals. of water. Apply at petal fall and every 10-14 days thereafter until control is achieved. **Peach Twig Borers:** Mix 1 1/4 lb. per 100 gals. of water and apply to peaches in May and June. **Leafhoppers (Peaches only):** Apply 1 1/4 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. **White Peach Scale (Peaches only):** As a post-harvest spray, apply 1 4/5-2 1/2 lbs. per 100 gals. of water timed to coincide with peak crawler and immature scale activity. Under conditions of heavy infestations, 2 applications may be necessary. Do not apply to peaches within 20 days, or to nectarines within 10 days, of harvest.

PEARS: Pear Leaf Blister Mites, Mealybugs, San Jose Scales, Brown Apricot Scales: Mix 1 1/4 lb. of Diazinon® 40W plus 2 gals. of dormant oil per 100 gals. of water. Apply as a dormant spray. **Pear Psylla:** Mix 5/8-1 1/4 lb. per 100 gals. of water. Apply as a cover spray at pre-pink stage. Make 1 to 2 additional applications during the first and second cover sprays if necessary. **Tentiform Leaf Miners, Mealybugs:** Mix 1 1/4 lb. per 100 gals. of water. Apply in 3 cover sprays, beginning in April. Refer also to Apples and Pears above. Do not apply within 14 days of harvest.

PECANS: Aphids, Mites, Pecan Nut Case-Bearers, Walnut Caterpillars: Apply 2 1/2-7 1/2 lbs. per acre as a foliage spray. Do not apply after husks crack.

PLUMS AND PRUNES: Peach Twig Borer, Mealy Plum Aphid eggs, San Jose Scales, Parlatoria Scales, Brown Almond Mites: Mix 1 1/4 lb. of Diazinon® 40W plus 2 1/2 gals. of dormant oil per 100 gals. of water. Apply as dormant spray. For late April or May applications, mix 1 1/4 lb. of Diazinon® 40W plus 1 gal. of light medium summer horticultural oil per 100 gals. of water. **Brown Mites (Clover Mites), European Red Mites:** Apply 1 1/4 lb. in 100 gals. of water. **Leaf Curl Plum Aphids, Mealy Plum Aphids, Thistle Aphids:** Apply 5/8-1 1/4 lb. per 100 gals. of water. Do not apply within 10 days of harvest.

STRAWBERRIES: Aphids, Two-Spotted Spider Mites: Apply 1 1/4 lb. in 100 gals. of water per acre. **Cyclamen Mites:** Apply 2 1/2 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 Crickets:** Broadcast 2 1/2 lbs. per acre when insects are present. Apply 1 to 2 days before transplanting and mix into the top 1-2 inches of soil immediately. **Strawberry Leaf Rollers:** Mix 1-1 1/4 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 1/2 lbs. per acre as a foliage spray. **Codling Moths, Scale Crawlers, Walnut Caterpillars:** Apply 7 1/2 lbs. per acre. Apply at petal fall and every 10-14 days thereafter until control is achieved. Do not apply after the husks open.

VEGETABLE FOLIAR INSECTS

Diazinon® 40W should always be applied as a spray in sufficient water to assure thorough coverage of the foliage.

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 shipped or used. Tops should not be used for feed or food.

COLLARDS, KALE, SWISS CHARD, AND TURNIP TOPS: Aphids, Imported Cabbageworms, Diamondback Moths, Harlequin Cabbage Bugs, Corn Earworms: Apply 5/8-1 1/4 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 Leaf Miners, Thrips: Apply 1 1/4 lb. per acre. Do not apply within 7 days of harvest.

MELONS AND SQUASH (Cantaloupes, Casabas, Crenshaws, Honeydew Melons, Muskmelons, Persian Melons, and hybrids of these; Watermelons and their hybrids; Summer and Winter Squash): Aphids, Leafhoppers, Mites: Apply 1 1/4-1 4/5 lbs. per acre. **Serpentine Leaf Miners, Thrips:** Apply 5/8-1 1/4 lb. per acre. Do not apply to melons or winter squash within 3 days, or to summer squash within 7 days, of harvest.

ONIONS: Onion Thrips: Apply 1 1/4 lb. per acre. Do not apply within 10 days of harvest.

PEAS: Aphids, Leaf Miners: Apply 1-1 1/4 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 forage is to be cut for hay.

PEPPERS: Aphids, Serpentine Leaf Miners: Apply 5/8 lb. per acre. Do not apply within 5 days of harvest.

POTATOES: Aphids, Flea Beetles, Colorado Potato Beetles, Dipterous Leaf Miners: Apply 5/8-1 lb. per acre. **Banded Cucumber Beetles, Leafhoppers, Southern Armyworms:** Apply 1-1 1/4 lbs. per acre. Do not apply within 35 days of harvest.

RADISHES, PARSNIPS, AND TURNIPS: Aphids, Flea Beetles, Dipterous Leaf Miners: Apply 5/8-1 1/4 lbs. per acre. Do not apply within 10 days of harvest.

SPINACH AND BEETS: Aphids, Dipterous Leaf Miners: Apply 5/8-1 1/4 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 above.

SWEET CORN: Corn earworms: Apply 2 1/2-3 1/8 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 forage may be fed to dairy and beef cattle and sheep. Refer also to Corn under Field and Forage Insects.

TOMATOES: Aphids, Dipterous Leaf Miners: Apply 5/8 lb. per acre. To control leaf miners, weekly applications are usually required. **Banded Cucur. Beetles, Fall Armyworms, Southern Armyworms:** Apply 1-1 1/4 lb. per acre. **Vinegar Flies (*Drosophila* spp.):** Apply 5/8-1 4/5 per acre. Weekly applications are usually required. Do not apply within 1 day of harvest.

VEGETABLE SOIL INSECTS

Diazinon® 40W should always be applied as a spray in sufficient water to assure thorough coverage of the soil.

Broadcast 25 lbs. per acre just prior to planting. Work into soil 4-8 inches immediately. This pre-plant treatment will also control cutworms (surface and subterranean), mole crickets, root maggots, and wireworms.

Mole Crickets:

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

Broadcast 2 1/2 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 1/2 lbs. per acre in sufficient water to drench the seed furrow at planting time. Broadcast 5-10 lbs. per acre just prior to planting. Work into soil 3-4 inches immediately.

ROOT MAGGOTS: Broccoli, Brussels Sprouts, Cabbage, and cauliflower: Broadcast Application: Broadcast 5-7 1/2 lbs. per acre and immediately work into the soil 3-4 inches before seeding, either in the seedbed or in the field or before transplanting. **Transplant Water (Drench) Application:** Mix 1/2-5/8 lb. in 50 gals. of transplant water, when 200-300 gals. of water are used per acre. May be applied at the rate of 5/8-1 1/4 cupful per plant, either by 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 transplanting. **Radishes:** Mix 2 1/2 lbs. in 50 gals. of water. Apply 80-100 gals. per acre (1-1 1/2 gals. per 1,000 linear feet of row) in the seed furrow at planting time.

Wireworms:

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

Broadcast 7 1/2-10 lbs. per acre prior to planting, and work into soil 4-8 inches immediately. **Potatoes:** Broadcast 7 1/2-15 lbs. per acre prior to planting. Immediately disk or harrow into soil 4-8 inches.

SOUTHERN POTATO WIREWORMS: Potatoes (Southeastern U.S.): For potatoes on mineral soils, broadcast 5-10 lbs. per acre prior to planting, and immediately work into soil 3-6 inches depending on location of wireworms.

FIELD AND FORAGE INSECTS

Diazinon® 40W 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.

should be made at the first sign of rootworm larvae. Application should not be made later than June 24 in the Middle Belt or July in the Northern Corn Belt.

SUGGESTED RATES ACCORDING TO ROW SPACING FOR CORN ROOTWORM LARVAE CONTROL

Row spacing	Linear feet of Corn row/acre	Amount of Diazinon® 40W per acre
		Postemergence Basal treatment
48"	10,890	17.5-35oz.
42"	12,455	19.4-38.75 oz.
40"	13,068	20-40 oz. (1.25-2.5 lbs.)
38"	13,939	21.9-43.75 oz.
36"	14,250	22.5-45 oz.
30"	17,424	27.5-55 oz. (1.9-3.44 lbs.)
24"	21,780	34.4-68.75 oz.
20"	26,136	40-80 oz. (2.5-5 lbs.)
15"	34,848	55-110 oz.

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

Seed Corn Maggots: Broadcast 5-10 lb. per acre just prior to planting. Work into soil immediately. **Cutworms (Surface Subterranean):** Broadcast 5-10 lbs. per acre. For surface cutworms apply just prior to planting or when larvae first appear work into soil 1-2 inches immediately, apply later than layby. For subterranean cutworms apply just prior to planting work into soil 3-6 inches immediately. **Wireworms:** Apply 7 1/2-10 lbs. per acre to planting and work into the soil 4-8 inches immediately. **Corn Rootworm Adult:** 5/8-1 1/4 lb. per acre. **Corn leaf Aphids:** 1 1/4-2 1/2 lbs. per acre in sufficient water provide complete coverage of the portions of plants. Repeat application necessary. **Grasshoppers:** Apply 1 1/4 lb. per acre. **Sap Beetles:** Apply 2 1/2-3 1/8 lb. per acre. Add 1-2 gals. of soluble mineral to the spray mixture. Consult agricultural authorities for proper timing. Corn may be picked immediately following last application. Corn forage be fed to dairy and beef cattle and sheep.

COTTON: Spider mites, Aphids, Leafhopper Lygus Bug, Cotton Leafworms, Cotton Perforators: Apply 1 1/2-2 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 or feed gin waste to livestock.

COWPEAS: Cutworms (Surface and subterranean): Broadcast 5-10 lbs. per acre prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms. 3-6 inches for subterranean cutworms.

HOPS: Aphids, Mites: Apply 2 1/2 lbs. per acre. Do not apply within 14 days of harvest.

LESPEDEZA: Cutworms (Surface and subterranean): Broadcast 5-10 lbs. per acre prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms. 3-6 inches for subterranean cutworms.

non 40W Insecticide

BEANS (Pole Beans, Snap Bean, Lima Beans): Bean Aphids, Mexican Bean Beetles, Miners: Apply 1 1/4-1 4/5 lbs. per acre. Flea Beetles: Apply 5/8-1 lb. in 100 gals. of water per acre. Do not apply within 7 days of bean harvest. 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.

BEANS: Dipterous Leaf Miners, Flea Beetles, Mites: Apply 1 1/4 lb. per acre. Do not apply within 7 days of bean harvest. 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.

BROCCOLI, CABBAGE, AND CAULIFLOWER: Imported Cabbageworms, Diamondback Moths, Imported Cabbageworms, Dipterous Leaf Miners: Apply 1 1/4 lb. per acre. Applications at 7-10 day intervals will usually be required. Do not apply to broccoli or cauliflower within 5 days, and to cabbage within 7 days of harvest.

BRUSSELS SPROUTS: Aphids, Diamondback Moths, Imported Cabbageworms: Apply 1 1/4 lb. per acre. Applications at 7-10 day intervals will usually be required. Do not apply to brussels sprouts within 7 days of harvest.

CABBAGE: Aphids: Apply 1 1/4 lb. per acre. Do not apply within 10 days of harvest.

CABBAGE: Aphids, Flea Beetles: Apply 1 1/4 lb. in 100 gals. of water per acre. Dipterous Leaf Miners: Apply 5/8-1 1/4 lb. per acre in sufficient water to achieve thorough coverage when infestations first appear. Do not apply within 10 days of harvest. Plants should be marketed (tops removed) before being fed or used. Tops should not be used for food.

CABBAGE, KALE, SWISS CHARD, AND TURNIP: Aphids, Imported Cabbageworms, Diamondback Moths, Harlequin Cabbage Moths, Corn Earworms: Apply 5/8-1 1/4 lb. per acre. Do not apply to collards, kale, or turnip within 10 days, or to Swiss chard within 7 days of harvest.

CABBAGE: Aphids, Serpentine Leaf Miners, Mites: Apply 1 1/4 lb. per acre. Do not apply within 7 days of harvest.

CABBAGE AND SQUASH (Cantaloupes, Watermelons, Persian Melons, and hybrids of Watermelons and their hybrids): Aphids, Flea Beetles, Mites: Apply 1 1/4-1 4/5 lbs. per acre. Do not apply to melons within 3 days, or to summer squash within 7 days, of harvest.

CABBAGE: Onion Thrips: Apply 1 1/4 lb. per acre. Do not apply within 10 days of harvest.

CABBAGE: Aphids, Leaf Miners: Apply 1-1 1/4 lb. per acre. Peas may be picked immediately. Forage and pea vine hay may be fed to dairy and beef cattle and sheep. Wait 4 days following treatment if forage is to be cut for hay.

CABBAGE: Aphids, Serpentine Leaf Miners, Mites: Apply 5/8 lb. per acre. Do not apply within 5 days of harvest.

CARROT RUST FLIES: Carrots: Apply 5 lbs. per acre as a drench to the seed furrow at planting time.

Cutworms: (Surface and Subterranean)

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

Broadcast 5-10 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 Symphylans (Centipedes):

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

Broadcast 25 lbs. per acre just prior to planting. Work into soil 4-8 inches immediately. This pre-plant treatment will also control cutworms (surface and subterranean), mole crickets, root maggots, and wireworms.

Mole Crickets:

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

Broadcast 2 1/2 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 1/2 lbs. per acre in sufficient water to drench the seed furrow at planting time. Broadcast 5-10 lbs. per acre just prior to planting. Work into soil 3-4 inches immediately.

ROOT MAGGOTS: Broccoli, Brussels Sprouts, Cabbage, and cauliflower: Broadcast Application: Broadcast 5-7 1/2 lbs. per acre and immediately work into the soil 3-4 inches before seeding, either in the seedbed or in the field or before transplanting. Transplant Water (Drench) Application: Mix 1/2-3/8 lb. in 50 gals. of transplant water, when 200-300 gals. of water are used per acre. May be applied at the rate of 5/8-1 1/4 cupful per plant, either by hand or by tractor-mounted

ALFALFA AND CLOVER: Spotted Alfalfa Aphids, Yellow Clover Aphids, Pea Aphids, Leafhoppers, Plant Bug Nymphs, Mites: Apply 1-1 1/4 lb. per acre. Grasshoppers: Apply 1 1/4 lb. per acre. Cutworms (Surface and Subterranean): Broadcast 5-10 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 7 days following treatment. Alfalfa Weevil Larvae: For control in the spring, apply 2 1/2-3 1/4 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 with either air or ground equipment except as directed below under Livestock Insects. Do not treat during bloom to avoid injury to pollinating insects.

CORN: Corn Rootworm Larvae: Postemergence Basal Treatment: Apply 1 1/2-3 1/8 oz. per 1,000 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 spacing chart for amounts recommended per acre. Cover treated band with 2-3 inches of soil using a disk tiller 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.

SUGGESTED RATES ACCORDING TO ROW SPACING FOR CORN ROOTWORM LARVAE CONTROL

Row spacing	Linear feet of Corn row/acre	Amount of Diazinon® 40W per acre	
		Postemergence Basal treatment	
48"	10,390	17.5-35oz.	
42"	12,455	19.4-38.75 oz.	
40"	13,068	20-40 oz.	(1.25-2.5 lbs.)
38"	13,939	21.9-43.75 oz.	
36"	14,250	22.5-45 oz.	
34"	17,424	27.5-55 oz.	
24"	21,780	34.4-68.75 oz.	(1.9-3.44 lbs.)
20"	26,136	40-80 oz.	
		55-110 oz.	(2.5-5 lbs.)
15"	34,848		

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

Seed Corn Maggots: Broadcast 5-10 lbs. per acre just prior to planting. Work into soil 2 inches immediately. Cutworms (Surface and Subterranean): Broadcast 5-10 lbs. per acre.

PEANUTS: Cutworms: Apply 5 lbs. per acre in a 12-inch band over the row. Use sufficient water to achieve thorough coverage. Begin application when small larvae appear. Two or three additional applications at three-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 5/8-1 1/4 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 5-10 lbs. per acre just prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

SOYBEANS: Cutworms (Surface and Subterranean): Broadcast 5-10 lbs. per acre just prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

SUGAR BEETS: Leafhoppers, Dipterous Leaf Miners, Aphids: Apply 1-1 1/4 lb. per acre. Grasshoppers: Apply 1 1/4 lb. per acre. Wireworms: Broadcast 7 1/2-10 lbs. per acre just prior to planting, and work into soil 4-8 inches immediately. Tops may be fed to beef and dairy animals.

SUGARCANE: Aphids: Apply 5/8-1 1/4 lb. per acre.

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

Wireworms: Apply 10 lbs. per acre in 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 5/8-1 lb. per acre. Do not apply within 3 days of harvest. Cutworms: Broadcast 5-7 1/2 lbs. per acre before transplanting and work immediately into the soil 2-4 inches. Green June Beetle Larvae: Mix 5/8 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. Mole Crickets: Broadcast 2 1/2 lbs. per acre, when insects are present. Make application to beds or fields 1-2 days prior to sowing of seed or transplanting, and work into soil 1-2 inches immediately. Seed-corn Maggots: Broadcast Application: Broadcast 3 1/2 lbs. per acre, 3-4 weeks before transplanting. Work into 2 inches immediately. Transplant Water Application: Mix 1 4/5-3 1/4 oz. in 50 gals. of transplant water. Wireworms: Broadcast Application: Broadcast 5-7 1/2 lbs. per acre, 3-4 weeks before transplanting. Work into soil 6-9 inches immediately. Transplant Water Application: Mix 1 4/5-3 1/4 oz. in 50 gals. transplant water.

Insects	Amount Diazinon® 40W to use	
	per 3 gals. water	per 100 gals. water
Aphids, Bagworms, Carnation Bud Mites, Carnation Shoot Mites, Clover Mites, Cyclamen Mites, Dipterous Leaf Miners, European Pine Shoot Moths, European Red Mites, Flea Beetles, Holly Bud Moths, Leafhoppers, Obscure Root Weevils, Omnivorous Leaf Tars, Privet Mites, Scale Crawlers (Cotton-Cushion, Lecanium, Pine Needle, San Jose, Soft Scale), Thrips, Two-Spotted Mites, Webworms, Whiteflies	5/8 oz.	1 1/4 lb.
Apple-and-Thorn Skeletonizers, Cotton-easter Webworms, Fall Webworms, Hemlock Chermes, Oak Looper, Oblong-banded Leaf Rollers, Pear Slugs, Tent Caterpillars	1 4/5 oz.	3 3/4 lb.

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

MIMOSA WEBWORMS: Mix 5/8 oz. in 3 gals. of water (or 1 1/4 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.

LAWN INSECTS

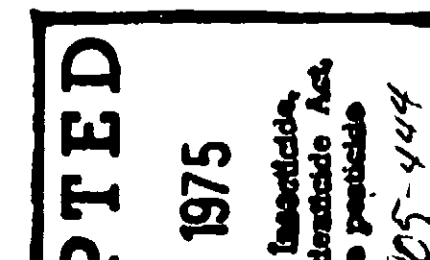
To control insects listed below, apply recommended rates. For Ants, Brown Dog Ticks, Clover Mites, Crickets, Earwigs, Fleas, Millipedes, Sowbugs, and Collembola (Springtails), which are commonly found near the house and may enter the house, spray a 5-ft. band of soil around the house as well as the house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

Insects	Rate: 1,000 sq. ft.		Remarks
	Diazinon 40W	Water	
Lawn Chinch Bugs	2 1/2-3 1/2 oz. or 3 1/2-7 1/2 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, Collembola (Springtails), Crickets, Cutworms, Digger Wasps, Earwigs, Fruit Flies, Lawn Billbugs, Sod webworms (Lawn Moths), Sowbugs	5 oz.	3 gals.	Spot spray ant hills and wasp ground nest openings. For lawn billbugs, irrigate the lawn thoroughly immediately after treatment. For fruit flies, mow grass and water well before treatment but delay application until grass is dry. Do not water again until necessary.
Brown Dog Ticks, Bermuda Mites, Chiggers, Fleas, Leafhoppers, Ticks	1 1/2 oz.	3 gals.	Do not apply to animals. For brown dog ticks, spray grass and under shrubbery particularly near house.
Millipedes	10 oz.	3 gals.	
Rhodes grass	10 oz.	25	Apply when crawlers

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 5/8 lb. of Diazinon® 40W with the sugar in 2 1/2 gals. of water and spot treat areas frequented by flies including cracks, crevices, doorways and around windows or other areas where flies congregate. Repeat applications as fly populations warrant. For sprinkling can application, mix 2 1/2 oz. of Diazinon® 40W with the sugar in 5 gals. of water and sprinkle lightly over the floor in areas frequented by flies. Applications everyday or two will generally be required.

MAGGOT CONTROL: For control of fly maggots, use 2 1/2 oz. of Diazinon® 40W in 5 gals. of water per 500 sq. ft. of fly breeding areas, such as garbage dumps and manure piles. Apply as a coarse spray or with a sprinkling can. Repeat applications will be necessary as additional garbage or manure is added. For control of maggots in vine stacks and similar refuse, mix 5/8 lb. of Diazinon® 40W in 20 gals. of water and spray at the rate of 1 gal. per 100 sq. ft. Treated vines or refuse should not be fed to animals. Good sanitation and proper disposal of wastes are necessary in any effective fly control program. 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.

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



Apply when infestations first appear. Do not apply within 10 days of harvest. Plants should be marketed (tops removed) before being used. Tops should not be used for food.

LETTUCE, KALE, SWISS CHARD, AND TURNIP: Aphids, Imported Cabbageworms, Diamondback Moths, Harlequin Cabbage Moths, Corn Earworms: Apply 5/8-1 1/4 lb. per acre. Do not apply to collards, kale, or turnip within 10 days, or to Swiss chard within 10 days of harvest.

CUMBERS: Aphids, Serpentine Leaf Miners, Fleas: Apply 1 1/4 lb. per acre. Do not apply within 7 days of harvest.

MELONS AND SQUASH (Cantaloupes, Watermelons, Honeydew Melons, Muskmelons, Persian Melons, and hybrids): Aphids, Watermelon and their hybrids; Summer and Winter Squash: Aphids, Flea Beetles, Mites: Apply 1 1/4-1 1/2 lb. per acre. Do not apply to melons within 3 days, or to summer squash within 7 days, of harvest.

PEAS: Onion Thrips: Apply 1 1/4 lb. per acre. Do not apply within 10 days of harvest.

PEAS: Aphids, Leaf Miners: Apply 1-1 1/4 lb. per acre. Peas may be picked immediately. Vines and pea vine may be fed to sheep and beef cattle and sheep. Wait 4 days before using treatment if forage is to be cut for sheep.

PEAS: Aphids, Serpentine Leaf Miners: Apply 5/8 lb. per acre. Do not apply within 5 days of harvest.

POTATOES: Aphids, Flea Beetles, Colorado Beetles, Dipterous Leaf Miners: Apply 1 lb. per acre. Banded Cucumber Beetles, Flea Beetles, Southern Armyworms: Apply 1 lb. per acre. Do not apply within 35 days of harvest.

POTATOES, PARSNIPS, AND TURNIPS: Aphids, Flea Beetles, Dipterous Leaf Miners: Apply 1 1/4 lb. per acre. Do not apply within 10 days of harvest.

SPINACH AND BEETS: Aphids, Dipterous Leaf Miners: Apply 5/8-1 1/4 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 above.

CORN: Corn earworms: Apply 2 1/2-3 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 forage may be fed to dairy cattle and sheep. Refer also to Corn Rootworm and Forage Insects.

POTATOES: Aphids, Dipterous Leaf Miners: Apply 5/8 lb. per acre. To control leaf miners, 2-3 applications are usually required. Banded Cucumber Beetles, Fall Armyworms, Corn Armyworms: Apply 1-1 1/4 lb. per acre. Vinegar Flies (*Drosophila* spp.): Apply 4/5 per acre. Weekly applications are usually required. Do not apply within 1 day of harvest.

FIELD SOIL INSECTS: Diazinon® 40W 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.

Broadcast 25 lbs. per acre just prior to planting. Work into soil 4-8 inches immediately. This pre-plant treatment will also control cutworms (surface and subterranean), mole crickets, root maggots, and wireworms.

Mole Crickets:

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

Broadcast 2 1/2 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 1/2 lbs. per acre in sufficient water to drench the seed furrow at planting time. Broadcast 5-10 lbs. per acre just prior to planting. Work into soil 3-4 inches immediately.

ROOT MAGGOTS: Broccoli, Brussels Sprouts, Cabbage, and cauliflower: Broadcast Application: Broadcast 5-7 1/2 lbs. per acre and immediately work into the soil 3-4 inches before seeding, either in the seedbed or in the field or before transplanting. Transplant Water (Drench) Application: Mix 1/2-5/8 lb. in 50 gals. of transplant water, when 200-300 gals. of water are used per acre. May be applied at the rate of 5/8-1 1/4 cupful per plant, either by 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 transplanting. Radishes: Mix 2 1/2 lbs. in 50 gals. of water. Apply 80-100 gals. per acre (1-1 1/2 gals. per 1,000 linear feet of row) in the seed furrow at planting time.

Wireworms

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

Broadcast 7 1/2-10 lbs. per acre prior to planting, and work into soil 4-8 inches immediately. Potatoes: Broadcast 7 1/2-15 lbs. per acre prior to planting. Immediately disk or harrow into soil 4-8 inches.

SOUTHERN POTATO WIREWORMS: Potatoes (Southeastern U.S.): For potatoes on mineral soils, broadcast 5-10 lbs. per acre prior to planting, and immediately work into soil 3-6 inches depending on location of wireworms.

FIELD AND FORAGE INSECTS

Diazinon® 40W 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.

Apply when insects first appear. Application should not be made later than June 24 in the Middle Corn Belt or July in the Northern Corn Belt.

SUGGESTED RATES ACCORDING TO ROW SPACING FOR CORN ROOTWORM LARVAE CONTROL

Row spacing	Linear feet of Corn row/acre	Amount of Diazinon® 40W per acre	
		Preemergence	Basal treatment
48"	10,890	17.5-35oz.	
42"	12,455	19.4-38.75 oz.	
40"	13,068	20-40 oz.	(1.25-2.5 lbs.)
38"	13,939	21.9-43.75 oz.	
36"	14,250	22.5-45 oz.	
34"	17,424	27.5-55 oz.	(1.9-3.44 lbs.)
24"	21,780	34.4-68.75 oz.	
20"	26,136	40-80 oz.	(2.5-5 lbs.)
15"	34,848	55-110 oz.	

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

Seed Corn Maggots: Broadcast 5-10 lbs. per acre just prior to planting. Work into soil 2 inches immediately. Cutworms (Surface and Subterranean): Broadcast 5-10 lbs. per acre. For surface cutworms apply just prior to planting or when larvae first appear and work into soil 1-2 inches immediately. Do not apply later than layby. For subterranean cutworms apply just prior to planting and work into soil 3-6 inches immediately. Wireworms: Apply 7 1/2-10 lbs. per acre prior to planting and work into the soil 4-8 inches immediately. Corn Rootworm Adult: Apply 5/8-1 1/4 lb. per acre. Corn leaf Aphids: Apply 1 1/4-2 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 1/4 lb. per acre. Sap Beetles: Apply 2 1/2-3 1/8 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 Leafworms, Cotton Leaf Perforators: Apply 1 1/4-2 1/4 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 waste to livestock.

COWPEAS: Cutworms (Surface and Subterranean): Broadcast 5-10 lbs. per acre, just prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

HOPS: Aphids, Mites: Apply 2 1/2 lbs. per acre. Do not apply within 14 days of harvest.

LESPEDEZA: Cutworms (Surface and Subterranean): Broadcast 5-10 lbs. per acre just prior to planting. Work into the soil immediately. 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

SUGARCANE: Aphids: Apply 5/8-1 1/4 lb. per acre.

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

Wireworms: Apply 10 lbs. per acre in 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 5/8-1 lb. per acre. Do not apply within 3 days of harvest. Cutworms: Broadcast 5-7 1/2 lbs. per acre before transplanting and work immediately into the soil 2-4 inches. Green June Beetle Larvae: Mix 5/8 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. Mole Crickets: Broadcast 2 1/2 lbs. per acre, when insects are present. Make application to beds or fields 1-2 days prior to sowing of seed or transplanting, and work into soil 1-2 inches immediately. Seed-corn Maggots: Broadcast Application: Broadcast 3 1/2 lbs. per acre, 3-4 weeks before transplanting. Work into 2 inches immediately. Transplant Water Application: Mix 1 4/5-3 3/4 oz. in 50 gals. of transplant water. Wireworms: Broadcast Application: Broadcast 5-7 1/2 lbs. per acre, 3-4 weeks before transplanting. Work into soil 6-9 inches immediately. Transplant Water Application: Mix 1 4/5-3 3/4 oz. in 50 gals. transplant water.

RANGE, PASTURE, AND GRASSLAND INSECTS

BERMUDA GRASS: Thrips, Whiteflies, Grasshoppers: Apply 1 1/4 lb. per acre.

RANGELAND, PASTURE, GRASS FORAGE, DITCH BANKS, ROADSIDES, WASTELAND, NONCROP AREAS, AND BARRIER STRIPS: Grasshoppers: Apply 1-1 1/4 lb. per acre in sufficient water or oil to obtain thorough coverage when insects first appear, preferably in the nymphal stage. 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 except as directed below under Livestock Insects with either air or ground equipment. Do not repeat application for 30 days.

ORNAMENTAL INSECTS

To control certain insects on Arborvitae, Azalea, Birch, Boxwood, Camellia, Carnation, Chrysanthemum, Douglas Fir, Elm, Gladioli, Hawthorn, Holly, Juniper, Lilac, Locust, Maple, Oak, Pine, Plum, Poplar, Rhododendron, Rose, Spruce, and Willow, apply the recommended rates indicated below:

Apply when insects first appear. Make a second and third application at 4-5 week intervals.

LAWN INSECTS

To control insects listed below, apply recommended rates. For Ants, Brown Dog Ticks, Clover Mites, Crickets, Earwigs, Fleas, Millipedes, Sowbugs, and Collembola (Springtails), 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: 1 000 sq. ft.		Remarks
	Diazinon 40W	Water	
Lawn Chinch Bugs	2 1/2-3 1/2 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, Collembola (Springtails), Crickets, Cutworms, Digger Wasps, Earwigs, Fruit Flies, Lawn Billbugs, Sod webworms (Lawn Moths), Sowbugs	5 oz.	3 gals.	Spot spray ant hills and wasp ground nest openings. For lawn billbugs, irrigate the lawn thoroughly immediately after treatment. For fruit flies, mow grass and water well before treatment but delay application until grass is dry. Do not water again until necessary.
Brown Dog Ticks, Bermuda Mites, Chiggers, Fleas, Leafhoppers, Ticks	1 1/2 oz.	3 gals.	Do not apply to animals. For brown dog ticks spray grass and under shrubbery, particularly near house.
Millipedes	10 oz.	3 gals.	
Rhodes-grass Scales	6 1/2 oz.	25 gals.*	Apply when crawlers first emerge.

*Alternately, make application in 3 gals. of water per 1 000 sq. ft. and thoroughly water immediately following application.

BOXELDER BUGS: Spray bugs outside the home with 1 1/2-3 1/8 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.

DUST FORMULATION BASED ON DIAZINON® 40W

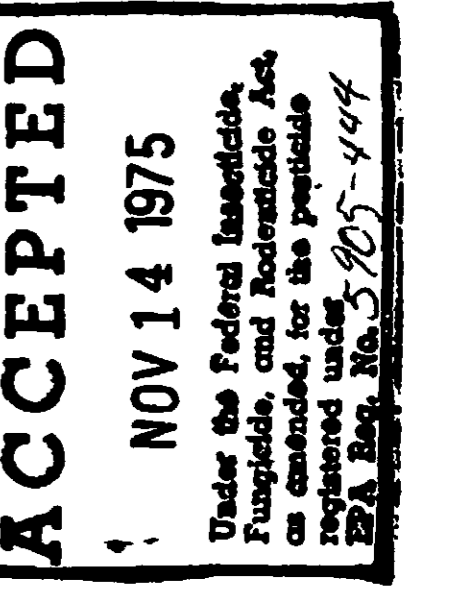
Diazinon® 40W is recommended for use in formulating dilute dust products. Formulators should contact the Industrial Sales Department, Agricultural Division, for information regarding diluents and suggested formulae.

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 1/2 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 building 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 run-off. One gallon of the above spray should cover 350-750 sq. ft. of area, depending on the surface treated.

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



WARRANTY AND LIMITATION OF DAMAGES. Helena Chemical Company warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use and Conditions of Sale, subject to the inherent risks referred to herein. Helena Chemical Company makes no other expressed or implied warranty including any other expressed or implied warranty of FITNESS or of MERCHANTABILITY, and no agent of Helena Chemical Company is authorized to do so except in writing with a specific reference to this warranty. Any damages arising from breach of this warranty shall be limited to direct damages, and shall not include consequential commercial damages such as loss of profits or value, etc.

EPA Reg. No. 5905-444 Net Weight