

9/2/97

PM 03

Container Label

100-456

09/13

ACCEPTED
 SEP - 2 1997
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 100-456

D·z·n®

Lawn & Garden Insect Control

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

For outdoor use on the home lawn and the home garden only.

Spray concentrate. Contains diazinon insecticide.

Active Ingredient:

Diazinon: O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate	25.0%
Inert Ingredients*:	75.0%
Total:	100.0%

*Contains aromatic petroleum distillates.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See side panel for additional precautionary statements.

EPA Reg. No. 100-456

**ONE PINT
NET CONTENTS**

Protects
 Lawns
 Vegetables
 Fruits and Nuts
 Roses, Flowers
 Trees, Shrubs

Controls
 Ants, Aphids
 Chinch Bugs
 Cutworms
 Fire Ants¹
 Flea Beetles
 Grubs, Mites
 Sod Webworms
 ...and many others
¹Aids in control.

See full label in booklet under cap for complete directions for mixing and applying this product and a complete list of pests controlled.

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DIRECTIONS FOR USE

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

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

GENERAL INFORMATION

D-z-n Lawn & Garden Insect Control is an emulsifiable concentrate product which must be diluted with water before application. This product kills many outdoor pests which damage lawns, roses, flowers, trees, shrubs, vegetables, fruits, and insects which annoy pets and people.

SEE THE BOOKLET UNDER CAP FOR COMPLETE DIRECTIONS FOR USE AND PESTS CONTROLLED.

Notes: (1) USE CONTENTS WITHIN 6 MONTHS AFTER OPENING. SEE STORAGE AND DISPOSAL DIRECTIONS. (2) Do not use inside the home. (3) Do not use on ferns, poinsettia, hibiscus, papaya, pilea, gardenia, or orchids since plant injury may occur. (4) Use this product on succulent peas and beans only. Do not use on dried pea or bean varieties. (5) Do not apply to food crops grown in greenhouses.

After spraying wait the following number of days before harvesting fruits, nuts, or vegetables:

1 day	Tomatoes
3 days	Melons, Winter Squash
5 days	Peppers, Strawberries
7 days	Beans, Blackberries, Blueberries, Boysenberries, Broccoli, Cauliflower, Cucumbers, Dewberries, Loganberries, Peas, Raspberries, Sweet Corn, Summer Squash
10 days	Chinese Broccoli, Chinese Cabbage, Collards, Kale
14 days	Carrots, Endive (Escarole), Lettuce, Onions (Bulb and Green), Parsnips, Radishes, Rutabagas, Spinach, Turnips
21 days	Apricots, Cabbage, Cherries, Nectarines, Peaches, Plums, Prunes
28 days	Grapes
35 days	Potatoes (Irish)
45 days	Walnuts
*	Almonds (one dormant spray only)

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

* This table is only a partial listing of the pests controlled by this product. See booklet under cap for complete directions for use and pests controlled.

Problem Area	Pests*
Nuisance Pests in Outside Areas	Ants, Brown Dog Ticks, Chiggers, Cockroaches, Crickets, Fleas, Fire Ants, Spiders, and others*
Lawns	Chinch Bugs, Ants, Sod Webworms, Brown Dog Ticks, Fleas, White Grubs, Lawn Billbugs, and others*
Vegetables: Foliar Application	
Beans, Peas (except dried varieties)	Aphids, Cucumber Beetles, Grasshoppers, Leafhoppers, Mexican Bean Beetles, Spider Mites
Broccoli, Chinese Broccoli, Cabbage, Chinese Cabbage, Cauliflower, Collards, Kale	Aphids, Flea Beetles, Dipterous Leafminers, Diamond-Back Moths, Imported Cabbageworms
Endive (Escarole), Lettuce, Spinach	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites

Peppers, Tomatoes	Aphids, Colorado Potato Beetles, Fall Armyworms (Tomatoes), Flea Beetles, Leafhoppers, Southern Armyworms (Tomatoes), Vinegar Flies - <i>Drosophila</i> spp. (Tomatoes)
Onions (Bulb and Green)	Onion Thrips
Radishes, Rutabagas, Turnips, Carrots, Parsnips, Potatoes	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Colorado Potato Beetles (Potatoes), Southern Armyworms (Potatoes)
Sweet Corn	Aphids, Flea Beetles, Grasshoppers, Spider Mites
Melons, Squash (Summer, Winter)	Aphids, Thrips, Spider Mites
Vegetables: Preplant Soil Application	
Beans, Peas (except dried varieties)	Cutworms, Mole Crickets, Wireworms (snap beans)
Beets, Red (Table)	Cutworms, Mole Crickets
Cabbage	Cutworms, Root Maggots, Wireworms
Carrots, Sweet Corn	Cutworms, Mole Crickets, Wireworms
Lettuce, Tomatoes	Cutworms, Wireworms
Radishes, Rutabagas, Turnips	Cutworms
Fruits & Nuts	
Almonds	Scale Crawlers
Walnuts (CA only - both crops)	Aphids, Scale Crawlers, Mites, and others*
Apricots, Peaches, Nectarines	Aphids, Apricot Mealybugs (Apricots), Spider Mites, Scale Crawlers
Blueberries	Cranberry Fruitworms, Cherry Fruitworms, Blueberry Maggots, Aphids, Thrips, Two-Spotted Spider Mites
Cherries	Black Cherry Aphids, Cherry Fruitflies, Cherry Rust Mites, Scale Crawlers, and others*
Plums, Prunes	Aphids, Spider Mites
Caneberries (Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries) (CA, OR, WA only - all crops)	Aphids, Leafhoppers, Two-spotted Spider Mites, Thrips, Raspberry Fruitworms
Strawberries	Aphids, Two-spotted Spider Mites, Strawberry Leafrollers
Grapes	Aphids, Grape Berry Moths, Grape Leafrollers, Leafhoppers
Roses & Flowers	
Azalea, Camellia, Chrysanthemum, Carnation, Gladioli, Lilac, Lilies, Marigolds, Pansies, Petunias, Rhododendron, Roses	Aphids, Flea Beetles, Dipterous Leafminers, Leafhoppers, Mealybugs, Two-spotted Spider Mites, Thrips, Whiteflies, and others*

Ornamental Trees & Shrubs

Arborvitae, Azalea, Aphids, Mites, Scale Crawlers, Whiteflies, Tent Caterpillars and others*
 Birch, Boxwood, Camellia,
 Crab Apple, Dogwood,
 Douglas Fir, Elm,
 Euonymus, Hawthorn,
 Holly, Honey Locust,
 Honeysuckle, Juniper,
 Lilac, Locust, Maple,
 Mimosa, Oak, Pine,
 Ornamental Plum, Poplar,
 Rhododendron,
 Scotch Pine, Spirea,
 Spruce, Sycamore, Wax
 Plant (Hoya), Willow,
 Yellowwood, Yew

STORAGE AND DISPOSAL**Storage**

Do not store near heat or open flame. Store in original container in an area inaccessible to children or pets. **USE CONTENTS WITHIN 6 MONTHS AFTER OPENING.**

Disposal

To avoid harming aquatic organisms in rivers and other surface waters, do not pour the concentrate, spray mixture, or rinse water into sanitary drains (for example, toilets, floor drains, and sinks) or into storm water sewers (for example, street drains). Do not reuse empty container. Triple rinse the empty container, pour the rinse water into the sprayer and spray the treated area. Securely wrap the empty container in several layers of newspaper and discard in trash. If disposal of a partially full container is necessary, take the container to your local household waste disposal facility, or make sure cap is tightly closed, securely wrap the container in several layers of newspaper and discard in trash.

PRECAUTIONARY STATEMENTS**Hazards to Humans and Domestic Animals****CAUTION**

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye injury. Avoid breathing spray mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Do not use inside the home. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans. Do not allow children or pets to go onto a treated area until the treated area, such as grass or soil, has dried. Do not contaminate ornamental fish ponds. Food utensils, such as spoons and measuring cups, must not be used for food purposes after use in measuring pesticides.

Statement of Practical Treatment

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

If inhaled: Remove victim to fresh air and apply artificial respiration if indicated. Get medical attention.

If on skin: Wash promptly with soap and water. Rinse thoroughly. Get medical attention.

If in eyes: Rinse eyes with plenty of water and call a physician immediately.

Note to Physician: This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. This product contains aromatic petroleum distillates which may present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

Environmental Hazards

This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Because of the migratory habits of certain Atlantic Coast waterfowl, do not apply this product to lawns in Nassau County, New York, between November 1 and May 20. Do not exceed maximum permitted label rates. Application rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping of sprays. For lawns, where irrigation (watering) is recommended in the directions, or if waterfowl (ducks or geese) can be expected in the treated area after treatment (except spot treatment), apply at least 1/4 inch of water immediately after spraying this product, however, stop watering before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. Do not apply directly to water. Runoff may be hazardous to aquatic organisms in neighboring areas. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab, and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

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

Physical or Chemical Hazards

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

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Novartis Crop Protection, Inc.
Greensboro, North Carolina 27419
NCP 1L150X 0697

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Lawn & Garden Insect Control

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

For outdoor use on the home lawn and the home garden only.

Spray concentrate. Contains diazinon insecticide.

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NET CONTENTS

Active Ingredient:

Diazinon: O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate	25.0%
Inert Ingredients*:	75.0%
Total:	100.0%

*Contains aromatic petroleum distillates.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See end of booklet for additional precautionary statements.

EPA Reg. No. 100-456

Protects

- Lawns
- Vegetables
- Fruits and Nuts
- Roses, Flowers
- Trees, Shrubs

Controls

- Ants, Aphids
- Chinch Bugs
- Cutworms
- Fire Ants¹
- Flea Beetles
- Grubs, Mites
- Sod Webworms
- ...and many others
- ¹Aids in control.

DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

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

CONDITIONS OF SALE AND WARRANTY

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

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

DIRECTIONS FOR USE

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

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

GENERAL INFORMATION

D-z-n Lawn and Garden Insect Control is an emulsifiable concentrate product which must be diluted with water before application. Refer to the section **How to Mix and Apply**. This product kills many outdoor insects which damage lawns, roses, flowers, trees, shrubs, vegetables, fruits and nuts, and insects which annoy pets and people. Contains diazinon insecticide which provides positive control of many "hard-to-kill" sucking and chewing insects. D-z-n Lawn and Garden Insect Control works fast and applications should be repeated only as directed to maintain control.

Notes: (1) USE CONTENTS WITHIN 6 MONTHS AFTER OPENING. SEE STORAGE AND DISPOSAL DIRECTIONS. (2) Do not use inside the home. (3) Do not use on ferns, poinsettia, hibiscus, papaya, pilea, gardenia, or orchids since injury may occur. (4) Use this product on succulent peas and beans only. Do not use on dried pea or bean varieties. (5) Do not apply to food crops grown in greenhouses.

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

How to Mix and Apply

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

Step #2: Use clean sprayer. Carefully measure and mix the amount of D-z-n Lawn and Garden Insect Control and water as indicated in the rate chart.

Step #3: Spray as directed in rate chart. Thorough coverage is important.

Step #4: Flush sprayer with clean water after each use.

See chart for complete list of use sites, crops, and insects controlled. Use the rate given in the chart for the type of insect you want to control on the site or crop you are spraying.

Measurement Conversions

- 1 tablespoon = 3 teaspoons
- 1 fl. oz. = 6 teaspoons or 2 tablespoons
- 6 fl. oz. = 3/4 cup
- 1 1/2 tablespoons in 3 gals. of water = 1 1/2 teaspoons in 1 gal. of water
- 2 tablespoons in 3 gals. of water = 2 teaspoons in 1 gal. of water

LAWN PEST CONTROL

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 and waterfowl. Avoid overlapping of sprays. Where irrigation (watering) is recommended in the directions, or if waterfowl (ducks or geese) can be expected in the treated area after treatment (except spot treatment), water lawn with at least 1/4 inch of water immediately after spraying this product; however, stop watering before puddling occurs.

Use on Bent, Bermuda, Bluegrass, Dichondra, Fescue, Merion, and St. Augustinegrass.

To control pests listed below, apply recommended rates. Repeat as necessary.

Pests	Rate		Remarks
	D-z-n	Water	
Lawn Chinch Bugs	1 1/2 tablespoons per 125 sq. ft. or 6 fl. oz. per 1,000 sq. ft.	3 gals. 24 gals.	Thoroughly wet down grass a few hours before applying. In the North, if Chinch Bugs are the only problem, a lower rate of application can be used: 3 teaspoons in 3 gals. of water covers 125 sq. ft. or 4 fl. oz. in 24 gals. of water per 1,000 sq. ft.
Ants, Armyworms, Bermudagrass, Mites, Clover Mites, Springtails, (Collembola), Crickets, Cutworms, Digger Wasps, Earwigs, Frit Flies, Lawn Billbugs, Leafhoppers, Sod Webworms (Lawn Moths), Sowbugs (Pillbugs)	1 1/2 tablespoons per 125 sq. ft. or 6 fl. oz. per 1,000 sq. ft.	3 gals. 24 gals.	Thoroughly wet down grass a few hours before applying. For ants and digger wasps, spot spray ant hills and wasp ground nest openings. For digger wasps, apply at dusk, when wasps are not active. Billbug control: Apply when activity is first observed or when chewed or brown grass is present indicating damage from the insect. For frit flies, mow grass and water thoroughly before treatment, but delay application until grass is dry.
Brown Dog Ticks, Chiggers, Fleas	1 1/2 tablespoons per 125 sq. ft. or 6 fl. oz. per 1,000 sq. ft.	3 gals. 24 gals.	Note: Do not apply this product to animals. For brown dog ticks, spray grass and under shrubbery, particularly near house.
Hyperodes Weevil	1 1/2 tablespoons per 125 sq. ft. or 6 fl. oz. per 1,000 sq. ft.	3 gals. 24 gals.	Treat problem areas in mid-April and again in mid-May. Water grass thoroughly after application.
Millipedes	1 1/2 tablespoons per 125 sq. ft. or 6 fl. oz. per 1,000 sq. ft.	3 gals. 24 gals.	Thoroughly wet grass a few hours before applying.
Rhodesgrass Scales	1 1/2 tablespoons per 125 sq. ft. or 6 fl. oz. per 1,000 sq. ft.	3 gals. 24 gals.	Apply when crawlers first emerge.

Pests	Rate		Remarks
	D-z-n	Water	
White Grubs of Japanese Beetle, European Chafer, Southern Chafer	1 1/2 tablespoons per 125 sq. ft. or 6 fl. oz. per 1,000 sq. ft.	3 gals. 24 gals.	Apply any time between late July and early October. Water grass thoroughly after application.

Nuisance Pests Outside the Home

Ants, Boxelder Bugs, Brown Dog Ticks, Chiggers, Clover Mites, Cockroaches, Crickets, Earwigs, Fleas, Flies, Millipedes, Sowbugs (Pillbugs), Spiders, Springtails (<i>Collembola</i>)	Mix 2 fl. oz. in 1 gal. 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 5-ft. 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 treat animals with this product. Do not treat plants (other than tree trunks) at this nuisance pest rate.
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Fire Ants	To aid in the control of fire ants in home lawns and other outdoor home recreation areas, apply 2 tablespoons in a minimum of 1 gal. of water as a drench. Apply over and 6 inches around each mound. Apply gently to avoid disturbing ants. Reapply as necessary. Larger quantities of solution can be prepared for multiple mound treatments. Use equipment capable of delivering the diluted product as a gentle rain at the rate of 1 gal. per mound. High pressure sprays may disturb the ants and cause migration, reducing product effectiveness. Note: For best results, apply in cool weather 65-80°F, or in early morning or late evening hours. Treat new mounds as they appear.
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INSECT CONTROL ON ORNAMENTAL TREES, SHRUBS AND FLOWERS

Spray when listed pests first appear. Repeat as necessary.

Trees and Shrubs	Insects	Rate Per 1 Gal. of Water	Timing/Special Directions
Arborvitae, Azalea, Birch, Boxwood, Camellia, Crab Apple, Dogwood, Douglas Fir, Elm, Euonymus, Hawthorn, Holly, Honey Locust, Honey-suckle, Juniper, Lilac, Locust, Maple, Mimosa, Oak, Pine, Ornamental Plum, Poplar, Rhododendron, Scotch Pine, Spirea, Spruce, Sycamore, Wax Plant (Hoya), Willow, Yellowwood, Yew	Aphids, Apple and Thorn Skeletonizers, Bagworms, European Pine Sawfly, European Pine Shoot Moths, Holly Bud Moths, Dipterous Leafminers (Arborvitae, Azalea, Birch, Boxwood, Holly Oak), Hemlock Chermes, Leafhoppers, Mealybugs, Mites (Clover, Cyclamen, European Red, Privet, Two-spotted Spider Mites, Oak Loopers, Obliquebanded Leafrollers, Obscure Root Weevils, Omnivorous Leaf-tiers, Pear Slugs, Scale Crawlers (Cottony-cushion, Euonymus, Lecanium, Pine Needle, Pit, San Jose, Soft), Terr Caterpillars, Webworms (Cotoneaster, Fall Juniper, Mimosa), Whiteflies	2 tea-spoons	Apply as a thorough foliar spray. Wet leaves and branches to the dripping point. Try to penetrate dense foliage with spray. Mimosa Webworms: apply when adults first appear. Make two additional applications at 4 to 5-week intervals.

Roses and Flowers	Insects	Rate Per 1 Gal. of Water	Timing/Special Directions
Azaleas, Camellias, Chrysanthemums, Carnations, Gladioli, Lilac, Lilies, Marigolds, Pansies, Petunias, Rhododendron, Roses	Aphids, Dipterous Leafminers, Euonymus Scale Crawlers, Flea Beetles, Leafhoppers, Mealybugs, Mites (Carnation Bud, Carnation Shoot, Cyclamen, European Red, Two-spotted Spider Mites), Thrips, Whiteflies	2 tea-spoons	Apply as a thorough foliar spray. Try to spray underside of leaves and penetrate dense foliage.

FRUITS AND NUTS

Start spraying after blooming. Applications should be made according to infestation or when aphids, mites, and crawler stages of scale insects are first noted.

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

Crop	PHI*
Almonds	**
Apricots	21
Blackberries	7
Blueberries	7
Boysenberries	7
Cherries	21
Dewberries	7
Grapes	28
Loganberries	7
Nectarines	21
Peaches	21
Plums	21
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 around the trees are in bloom.

Crop	Pest	Rate	Timing/Special Directions
Almonds (CA only)	San Jose Scale, Parlatoria Scale	2 tablespoons in 3 gals. of water	Apply only as a dormant spray. Do not apply more than 6 gals. per 500 sq. ft. of home orchard. This product may be used on almonds only in CA. Do not use this product on almonds grown in other states.

Crop	Pest	Rate	Timing/Special Directions
Apricots	Aphids, Apricot Mealybugs, Mites (Brown, Two-spotted Spider Mites), Scale Crawlers (Olive, San Jose)	4 teaspoons in 2 gals. of water	Apply as a full cover spray. Do not apply more than 4 gals. per 500 sq. ft. of home orchard. Do not make more than 3 applications per season, a minimum of 14 days apart. Do not apply within 21 days of harvest.
Blueberries	Aphids, Blueberry Maggots, Cherry Fruitworms, Cranberry Fruitworms, Thrips, Two-spotted Spider Mites	4 teaspoons in 2 gals. of water	Apply as a full cover spray. Allow a minimum of 14 days between applications. Do not apply more than 4 gals. per 500 sq. ft. of blueberry patch. Do not make more than 2 applications per season. Allow a minimum of 7 days between the last application and harvest.
Caneberries (CA, OR, WA only): Blackberries, Boysenberries, Dewberries, Loganberries Raspberries	Aphids, Leafhoppers, Raspberry Fruitworms, Two-spotted Spider Mites, Thrips	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 5 gals. per 500 sq. ft. of caneberry patch. Do not make more than 5 applications per season, a minimum of 14 days apart. Do not apply within 7 days of harvest. This product may be used on caneberries only in CA, OR, and WA. Do not use this product on caneberries grown in other states.
Cherries	Black Cherry Aphids, Cherry Fruitflies, Cherry Fruitworms (Maggots), Fruitree Leafrollers, Mites (Cherry Rust), Scale Crawlers (San Jose)	4 teaspoons in 2 gals. of water	Apply as a full cover spray. Do not apply more than 4 gals. per 500 sq. ft. of home orchard. Do not make more than 3 applications per season, a minimum of 7 days apart. Do not apply within 21 days of harvest.
Grapes	Aphids, Leafhoppers, Grape Berry Moths, Grape Leafrollers	4 1/2 teaspoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 3 gals. per 500 sq. ft. of home vineyard. Do not make more than 5 applications per season, a minimum of 7 days apart. Do not apply within 28 days of harvest.
Nectarines	Aphids, Mites (Brown, Two-spotted Spider Mites), Scale Crawlers (Olive, San Jose)	4 teaspoons in 2 gals. of water	Apply as a full cover spray. Do not apply more than 4 gals. per 500 sq. ft. of home orchard. Do not make more than 3 applications per season, a minimum of 14 days apart. Do not apply within 21 days of harvest.

Crop	Pest	Rate	Timing/Special Directions
Peaches	Aphids, Mites (Brown, Two-spotted Spider Mites), Scale Crawlers (Olive, San Jose)	4 teaspoons in 2 gals. of water	Apply as a full cover spray. Do not apply more than 4 gals. per 500 sq. ft. of home orchard. Do not make more than 3 applications per season, a minimum of 14 days apart. Do not apply within 21 days of harvest.
Plums and Prunes	Aphids (Leafcurl Plum, Mealy Plum, Thistle), Mites (Brown, European Red)	4 teaspoons in 2 gals. of water	Apply as a full cover spray. Do not apply more than 4 gals. per 500 sq. ft. of home orchard. Do not make more than 3 applications per season, a minimum of 7 days apart. Do not apply within 21 days of harvest.
Strawberries	Aphids, Two-spotted Spider Mites, Strawberry Leafrollers	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 3 gals. per 500 sq. ft. of strawberry patch. Do not make more than 3 applications per season, a minimum of 7 days apart. Do not apply within 5 days of harvest.
Walnuts (CA only)	Aphids, Scale Crawlers (Walnut, Italian Pear, Frosted), Spider Mites, Twig Borers	2 tablespoons in 3 gals. of water	Apply as a full cover spray. Do not apply more than 6 gals. per 500 sq. ft. of home orchard. Do not make more than 3 applications per season, a minimum of 14 days apart. Do not apply after husks open or split. Do not apply within 45 days of harvest. This product may be used on walnuts only in CA. Do not use this product on walnuts grown in other states.

VEGETABLES

For foliar or soil applications, D-z-n Lawn and Garden Insect Control should be applied in the volume of water recommended in the table below to assure thorough coverage of the foliage or soil.

Observe stated time intervals between last application and harvest as well as intervals between applications and maximum numbers of applications per season. Do not apply to food crops grown in greenhouses.

Pre-Harvest Intervals (PHI*) for Foliar Applications

Crop	PHI* (Days)
Beans ¹ (succulent varieties only: Lima, Pole, and Snap)	7
Broccoli	7
Cabbage	21
Cantaloupes	3
Carrots	14
Casabas	3
Cauliflower	7
Chinese Broccoli	10
Chinese Cabbage	10
Collards	10
Crenshaws	3
Cucumbers	7
Endive (Escarole)	14
Honeydew Melons	3
Kale	10
Lettuce	14
Muskmelons	3
Onions (Bulb and Green)	14
Parsnips	14
Peas ¹	7
Peppers	5
Persian Melons	3
Potatoes (Irish)	35
Radishes	14
Rutabagas	14
Spinach	14
Squash, Summer	7
Squash, Winter	3
Sweet Corn	7
Tomatoes	1
Turnips (Roots and Tops)	14
Watermelons	3

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

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

VEGETABLES

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

Crop	Pest	Rate	Timing/Special Directions
Beans, Lima, Pole, and Snap (succulent varieties only)	Aphids, Cucumber beetles, Grasshoppers, Leafhoppers, Mexican Bean Beetles, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 5 days, up to 3 applications per season. Do not apply within 7 days of harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly 1-2 days before planting. Immediately work into soil 1-2 inches.
	Wireworms (snap beans only)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly just before planting. Immediately work into soil 4-8 inches.

Notes: (1) Do not apply this product to dried bean varieties such as pinto beans or dried limas. (2) To protect bees, do not apply bean foliage treatments if the beans or weeds in the treatment area are in bloom.

Beets, Red (Table)	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly 1-2 days before planting. Immediately work into soil 1-2 inches.
Broccoli	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 7 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Cabbage	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 21 days of harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Root Maggots	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1 1/2 gals. of water	Spray the soil evenly just before planting. Immediately work into soil 4-8 inches.

Crop	Pest	Rate	Timing/Special Directions
Carrots	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly 1-2 days before planting. Immediately work into soil 1-2 inches.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 4-8 inches.
Cauliflower	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 7 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Chinese Broccoli	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 10 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Chinese Cabbage (Bok Choy and Napa)	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 10 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Collards	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 10 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.

Crop	Pest	Rate	Timing/Special Directions
Corn (see sweet corn)			
Cucumbers	Aphids, Thrips, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 7 days of harvest.
Endive (Escarole)	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Kale	Aphids, Diamondback Moths, Flea Beetles, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 10 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Lettuce	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 4-8 inches.
Melons (Cantaloupes, Casabas, Crenshaws, Honeydews, Muskmelons, Persians, and Hybrids of these) and Watermelons	Aphids, Thrips, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 3 days of harvest.
Onions (Bulb and Green)	Onion Thrips	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest.

Crop	Pest	Rate	Timing/Special Directions
Parsnips	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Peas (succulent only)	Aphids, Cucumber Beetles, Grasshoppers, Leafhoppers, Mexican Bean Beetles, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 5 days, up to 3 applications per season. Allow at least 7 days between the last application and harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly 1-2 days before planting. Immediately work into soil 1-2 inches.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 4-8 inches.

Notes: (1) Do not apply this product to dried pea varieties such as split peas or dried black-eyed peas. (2) To protect bees, do not apply foliage treatments if peas or weeds in the treatment area are in bloom.

Peppers	Aphids, Colorado Potato Beetles, Flea Beetles, Leafhoppers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 5 days of harvest.
Potatoes	Aphids, Flea Beetles, Leafhoppers, Colorado Potato Beetles, Southern Armyworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 35 days of harvest. Note: Resistant Leafminers will not be controlled by diazinon or similar type insecticides.
Radishes	Aphids, Flea Beetles, Leafhoppers, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 3 applications per season. Do not apply within 14 days of harvest. Note: Resistant Leafminers will not be controlled by diazinon or similar type insecticides.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

Crop	Pest	Rate	Timing/Special Directions
Rutabagas	Aphids, Flea Beetles, Leafhoppers, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
Spinach	Aphids, Flea Beetles, Leafhoppers, Dipterous Leafminers, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
Squash, Summer	Aphids, Thrips, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest.
Squash, Winter	Aphids, Thrips, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest.
Sweet Corn	Aphids, Thrips, Flea Beetles, Grasshoppers, Spider Mites	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Corn may be picked 7 days following last application.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Mole Crickets	2 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly 1-2 days before planting. Immediately work into soil 1-2 inches.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 4-8 inches.

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

Crop	Pest	Rate	Timing/Special Directions
Tomatoes	Aphids Colorado Potato Beetles Fall Armyworms, Flea Beetles, Leafhoppers, Southern Armyworms, Vinegar Flies (<i>Drosophila</i> spp.)	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 1 day of harvest.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.
	Wireworms	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 4-8 inches.
Turnips and Turnip Tops	Aphids, Flea Beetles, Leafhoppers, Imported Cabbageworms, Dipterous Leafminers	1 teaspoon in 1 gal. of water to cover 500 sq. ft. of garden	Thoroughly spray all plant parts. Repeat application every 7 days, up to 5 applications per season. Do not apply within 14 days of harvest. Note: Resistant leafminers will not be controlled by diazinon or similar type insecticides.
	Cutworms (surface, subterranean)	6 tablespoons per 500 sq. ft. in a minimum of 1½ gals. of water	Spray the soil evenly just before planting. Immediately work into soil 2-3 inches for surface cutworms, 3-6 inches for subterranean cutworms.

STORAGE AND DISPOSAL

Storage

Do not store near heat or open flame. Store in original container in an area inaccessible to children and pets. **USE CONTENTS WITHIN 6 MONTHS AFTER OPENING.**

Disposal

To avoid harming aquatic organisms in rivers and other surface waters, do not pour the concentrate, spray mixture, or rinse water into sanitary drains (for example, toilets, floor drains, and sinks) or into storm water sewers (for example, street drains). Do not reuse empty container. Triple rinse the empty container, pour the rinse water into the sprayer and spray the treated area. Securely wrap empty container in several layers of newspaper and discard in trash. If disposal of a partially full container is necessary, take the container to your local household waste disposal facility, or make sure cap is tightly closed, securely wrap the container in several layers of newspaper and discard in trash.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye injury. Avoid breathing spray mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Do not use inside the home. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans. Do not allow children or pets to go onto a treated area until the treated area, such as grass or soil, has dried. Do not contaminate ornamental fish ponds. Food utensils, such as spoons and measuring cups, must not be used for food purposes after use in measuring pesticides.

Statement of Practical Treatment

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

If inhaled: Remove victim to fresh air and apply artificial respiration if indicated. Get medical attention.

If on skin: Wash promptly with soap and water. Rinse thoroughly. Get medical attention.

If in eyes: Rinse eyes with plenty of water and call a physician immediately.

Note to Physician: This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present, atropine sulfate by injection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. This product contains aromatic petroleum distillates which may present an aspiration hazard. Gastric lavage may be indicated if product was taken internally.

Environmental Hazards

This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Because of the migratory habits of certain Atlantic Coast waterfowl, do not apply this product to lawns in Nassau County, New York, between November 1 and May 20. Do not exceed maximum permitted label rates. Application rates above those recommended significantly increase potential hazards to birds and waterfowl. Avoid overlapping of sprays. For lawns, where irrigation (watering) is recommended in the directions, or if waterfowl (ducks or geese) can be expected in the treated area after treatment (except spot treatment), water lawn with at least ¼ inch of water immediately after spraying this product, however, stop watering before puddling occurs. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. Do not apply directly to water. Runoff may be hazardous to aquatic organisms in neighboring areas. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab, and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

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

Physical or Chemical Hazards

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

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