

16-179

12-5-2002

1/14



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
401 "M" St., S.W.
Washington, D.C. 20460

EPA Reg. Number:

16-179

Date of Issuance

December 5, 2002

Term of issuance:

Conditional

Name of Pesticide Product

Dragon Carbaryl 2L Concentrate
Insecticide

NOTICE OF PESTICIDE:

Registration

Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Dragon Chemical Corporation
71 Carolyn Boulevard
Farmingdale, NY 11735

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

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

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

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7) (A). Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3).

1. Make the following changes to the labeling:
 - a. Revise the EPA Registration Number to read "EPA Reg. No. 16-179."
 - b. Under Environmental Hazards delete the section "Do not discharge effluent...for more information)." This language is reserved for manufacturing use products.
 - c. Efficacy data must be submitted or cited to support control of the following public health pests: all ticks, mosquitoes, cockroaches, fleas and chiggers. Either provide efficacy data or delete these pests wherever they appear on the label.

Signature of Approving Official:

Date:

12/05/02

2/14

Page 2
EPA Reg. No. 16-179

- d. Storage stability and corrosion characteristics studies must be submitted within 12 months from the date of this registration notice.
- e. Please submit two (2) copies of your final printed label before you release the product for shipment. Please refer to the A-79 enclosure for a further description of final printed labeling.

A stamped copy of the label is enclosed for your records. If you have questions about this letter, please contact me at 703-605-0716 (by phone), 703-305-6596 (by fax), or at mccann.geri@epa.gov (by E-Mail).

Sincerely,



Geraldine R. McCann
Environmental Protection Specialist
Insecticide/Rodenticide Branch
Registration Division (7505C)

Enclosures:
Stamped Label
A-79 Form

3/14

DRAGON Carbaryl 2L CONCENTRATE Insecticide

For effective control of listed insect pests on Vegetable crops, tree Fruit and Nut crops, small Fruit crops, Trees, Ornamentals, Lawns and Recreation areas. Also for control of Mosquitoes. Can be used around the home as directed.

ACTIVE INGREDIENT:

Carbaryl (1-Naphthyl N-methylcarbamate).....	22.5%
OTHER INGREDIENTS.....	77.5%
TOTAL	100.0%

ACCEPTED
with COMMENTS
In EPA Letter Dated
DEC 5 2002

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See FIRST AID and Additional Precautionary Statements Below
SHAKE WELL BEFORE USING

16-179
EPA Reg. No. 16-
EPA Est. No. 16-VA-1

Net Contents:

FIRST AID

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.

IF INHALED: Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

Call a poison control center, the National Pesticide Information Center (800-858-7378) or doctor for treatment advice.

NOTE TO PHYSICIAN: Carbaryl 2L Concentrate Insecticide contains an N-methyl carbamate that inhibits cholinesterase. Atropine is antidotal. Do not use 2-PAM (pyridene-2-aldoxime methiodide), opiates or cholinesterase inhibiting drugs. Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed, absorbed through the skin, inhaled, or if in eyes. Avoid breathing spray mist. Avoid contact with eyes, skin or clothing. Do not use this product in commercial food areas of food handling establishments, restaurants or other places where food is prepared or processed.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

WPS USES: Applicators and others who handle this pesticide for uses covered by the Worker Protection Standard (40 CFR 170) (in general, agricultural plant uses are covered) must wear: Long sleeved shirt and long pants, waterproof gloves and shoes plus socks. Wear a hat and eye protection when making overhead applications.

NON-WPS USES: Applicators and others who handle this pesticide for any uses NOT covered by the Worker Protection Standard (40 CFR 170) must wear: Long-sleeved shirt and long pants, shoes plus socks and household latex or rubber gloves when mixing and applying this product. Wear a hat and eye protection when making overhead applications.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY REQUIREMENTS

Users should: 1) Wash hands thoroughly immediately after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. Wash thoroughly and change into clean clothing. Avoid contamination of food and feed. Do not allow children or pets to contact treated area until sprays have dried.

4/14

ENVIRONMENTAL HAZARDS

This product is extremely toxic to aquatic and estuarine invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge (see the technical labels for more information). For terrestrial uses only. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated area. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not contaminate water when disposing of equipment washwaters.

BEE CAUTION: MAY KILL HONEYBEES IN SUBSTANTIAL NUMBERS. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

GENERAL INFORMATION

DRAGON CARBARYL 2L is for effective control of many listed insect pests on vegetable crops, tree fruit and nut crops, small fruit crops, trees and ornamentals and lawn and recreation areas. Also for control of mosquitoes. Can be used around the home as directed. This product readily disperses in water to form a spray suspension suitable for home and garden use. *Read entire label before use.* Strictly observe label directions and applicable Federal, Local and State regulations.

PLANT RESPONSE PRECAUTIONS

To avoid possible injury to tender foliage, do not apply to wet foliage or when rain or high humidity is expected during the next two days. This product injures Boston Ivy, Maiden-hair fern and Virginia creeper. During early season, it may also injure Virginia and Sand pines.

DIRECTIONS FOR USE

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

Do not apply this product through any type of irrigation system. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. Keep unprotected persons out of treated areas until sprays have dried. For any requirements specific to your State, Locality or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE), restricted entry interval (REI) and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such a plants, soil, or water is: Coveralls, waterproof gloves and shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

The area being treated must be vacated by unprotected persons. Keep unprotected persons out of treated areas until sprays have dried.

DIRECTIONS FOR RESIDENTIAL USE

Apply when air is calm to avoid drift and contact with eyes and skin. Start spraying at the farthest corner of the treatment area and work backward to avoid contact with wet surfaces. Allow spray to dry in treated areas before re-entering. For trees taller than 10 feet, consider hiring a licensed professional. Spray thoroughly to wet upper and lower leaf surfaces, stems and branches. Do not repeat applications more than once a week. Subsequent planting of food and feed crops in treated soil must be made with crops on this or other carbaryl labels. Do not use application methods, dosages, concentrations or frequencies not listed on labeling. Do not apply against target pests or crops not listed on labeling. Do not mix with fertilizers.

SPRAY PREPARATION

To assure a uniform product, stir or shake all containers of this product prior to use. Clean sprayer thoroughly before use. Prepare only as much spray mixture as is needed on the day of mixing. Fill sprayer with $\frac{1}{2}$ to $\frac{3}{4}$ the desired amount of water. Slowly add the required amount of this product and then the remaining volume of water. Shake spray mixtures frequently before and during use to prevent settling. Do not store spray mixtures overnight. To clean your sprayer after use, drain and flush with water. Do not use contaminated teaspoons or other measuring devices for other purposes.

COMPATIBILITY

This product when diluted with an equal volume of water is compatible with a wide range of pesticides. It is not compatible with diesel fuel, kerosene, fuel oil or aromatic solvents. If compatibility of this product with another product and the resulting plant response is unknown, it should be tested on a small scale. Curdling, precipitation, greasing, layer formation or increased viscosity are usually symptoms of incompatibility. When preparing combination sprays, first add this product to at least an equal volume of water, mix thoroughly and then add combination products to the mixture. Do not apply combinations unless your previous experience indicates the mixture is effective and will not result in application problems, excessive residues or plant injury. Unstable under highly alkaline conditions. Not effective if used with alkaline materials such as Bordeaux, lime-sulfur and casein-lime spreaders.

INSECT CONTROL

Apply when insects or their damage appear. To maintain control, repeat at 7 to 14 day intervals or as necessary unless a shorter interval is specified below. Where a dosage range is indicated, use lower rate on young plants and early instars and higher rate on mature plants, advanced instars and adults. Thorough and uniform spray coverage is essential for effective control. Avoid applications just before rainfall as poor insect control may result. This product does not control Spider mites. If Spider mites are a problem, use a registered miticide.

6/14

VEGETABLE CROPS

All dosages refer to teaspoonfuls of this product per gallon of water. Typical spray gallonage per 430 square feet ranges from 1 to 2 gallons. Do not exceed maximum dosage rate per 430 square feet per application. One teaspoonful equals 0.17 fluid ounces or 5 milliliters. Three teaspoonfuls equal one tablespoonful. PHI – pre-harvest interval in days.

Crops	Insects	Teaspoons Per Gallon	PHI (Days)
All vegetable crops in this section	Grasshoppers	2 to 6	See specific vegetable crop
	SPECIFIC DIRECTIONS: Use 2 to 3 teaspoons per gallon for nymphs on small plants or sparse vegetation. Use 4 to 6 teaspoons per gallon for adult Grasshoppers or application to dense vegetation.		
Asparagus	Asparagus beetles	4 to 8	1
	Apache cicadas, Asparagus beetles	8 to 16	
SPECIFIC DIRECTIONS: Treat ferns or brush growth following harvest of spears. Do not treat more than once every 7 days.			
Beans (including blackeyed peas, cowpeas, crowder or southern peas, dry beans, green beans, lima beans, navy beans and snap beans)	Blister beetles, Mexican bean beetles	2 to 4	3 (Fresh) 21 (Dried)
	Alfalfa caterpillars, Bean leaf beetles, Cucumber beetles, Flea beetles, Green cloverworms, Japanese beetles, Leafhoppers, Three cornered alfalfa hoppers, Thrips, Velvetbean caterpillars, Western bean cutworms	4	
Beans (including blackeyed peas, cowpeas, crowder or southern peas, dry beans, green beans, lima beans, navy beans, snap beans)	Armyworms, Corn earworms, Cutworms, European corn borers, Fall armyworms, Stink bugs, Tarnished plant bugs, Webworms	4 to 6	3 (Fresh) 21 (Dried)
	Cowpea curculios	8	
	SPECIFIC DIRECTIONS: Observe plant response precautions.		
	Corn earworms, Lima bean pod borers, Lygus bugs, Stink bugs	8	3 (Fresh) 21 (Dried)
	SPECIFIC DIRECTIONS: CA only.		
Broccoli, Brussels sprouts, Cabbage, Cauliflower, Kohlrabi	Flea beetles, Harlequin bugs	2 to 4	3
	Armyworms, Corn earworms, Fall armyworms, Imported cabbageworms	4 to 8	
Chinese cabbage, Collards, Hanover salad, Horseradish, Kale, Mustard greens, Radishes, Rutabagas, Turnips	Flea beetles, Harlequin bugs, Leafhoppers	2 to 4	7 (Horseradish, Radishes, Rutabagas, Turnip roots) 14 (Chinese cabbage, Collards, Hanover salad, Kale, Mustard greens, Turnip tops)
	Aster leafhoppers	4 to 6	

7/14

Crops	Insects	Teaspoons Per Gallon	PHI (Days)
Carrots, Celery, Parsley, Parsnips	Armyworms, Corn earworms, Fall armyworms, Imported cabbageworms, Stink bugs; Tarnished plant bugs	4 to 8	7 (Carrots, Parsnips) 14 (Celery, Parsley)
	Flea beetles, Leafhoppers	2 to 4	
	Aster leafhoppers, Lygus bugs, Spittlebugs	4 to 6	
	Armyworms, Corn earworms, Fall armyworms, Stink bugs, Tarnished plant bugs	4 to 8	
	SPECIFIC DIRECTIONS: Do not treat more than once every 7 days.		
Corn	Armyworms, Chinch bugs, Corn earworms, Corn rootworm adults, European corn borers, Fall armyworms, Flea beetles, Japanese beetles, Sap beetles, southwestern corn borers, Leafhoppers	4 to 8	2
	SPECIFIC DIRECTIONS: Observe Bee Caution. For insects attacking silks and ears, apply no more than once every 7 days, starting when first silks appear and continuing until silks begin to dry. For larvae in whorl and foliage feeders, apply as necessary. For Chinch bugs, use high gallonage ground application directed at the base of plant. Optimum timing and good coverage are essential for effective control.		
	Western bean cutworms	8	3
	SPECIFIC DIRECTIONS: Treat when infestation averages 15% and at 90% to 100% tassel emergence. Treatment after 100% silk emergence will reduce effectiveness.		
Cucumber, Melons, Pumpkin, Squash	Melonworm, Pickleworms	2 to 4	3
	Cucumber beetles, Flea beetles, Leafhoppers, Squash bugs	4	
	SPECIFIC DIRECTIONS: Observe plant response precautions. Avoid excessive applications.		
Dandelions, Endive (escarole), Lettuce, Salsify	Flea beetles, Harlequin bugs, Leafhoppers	2 to 4	7 (Salsify roots) 14 [Dandelions, Endive (escarole), Head lettuce, Leaf Lettuce, Salsify tops]
	Aster leafhopper, Lygus bugs, Spittlebugs	4 to 6	
	Armyworms, Corn earworms, Fall armyworms, Imported cabbageworms, Stink bugs, Tarnished plant bugs	4 to 8	
	SPECIFIC DIRECTIONS: Observe plant response precautions. Do not treat more than once every 7 days.		
Eggplant, Pepper, Potato, Tomato	Colorado potato beetles, Flea beetles, Leafhoppers	2 to 4	3 (Eggplant, Pepper, Tomato)
	European corn borers, Fall armyworms, Lace bugs, Stink bugs, Tarnished plant bugs, Tomato fruitworms, Tomato hornworms, Tomato pinworms	4 to 8	
	Cutworms	8	7 (Potato)

8/14

Crops	Insects	Teaspoons Per Gallon	PHI (Days)
Garden beets, Spinach, Swiss chard	Flea beetles, Harlequin bugs, Leafhoppers	2 to 4	7 (Garden beet roots)
	Aster leafhoppers	4 to 6	14 (Garden beet tops, Spinach, Swiss chard)
	Armyworms, Corn earworms, Fall armyworms, Stink bugs, Tarnished plant bugs	4 to 8	
	SPECIFIC DIRECTIONS: Do not treat more than once every 7 days.		
Okra	Corn earworms, Stink bugs	4 to 8	3
	SPECIFIC DIRECTIONS: Do not apply more than once every 7 days		
Peanuts	Blister beetles, Mexican bean beetles	2 to 4	14
	Alfalfa caterpillars, Bean leaf beetles, Cucumber beetles, Green cloverworms, Japanese beetles, Leafhoppers, Rednecked peanutworms, Three cornered alfalfa hoppers, Thrips, Velvetbean caterpillars	4	
	Armyworms, Corn earworms, Fall armyworms, Stink bugs, Webworms	4 to 6	
	Cutworms, White-fringed beetles (adults)	8	
	SPECIFIC DIRECTIONS: Observe plant response precautions.		
Peas	Colorado potato beetles, Leafhoppers	4	3 (Fresh)
	Armyworms	4 to 6	21 (Dried)
	Alfalfa caterpillars, Cutworms, Pea leaf weevils, Pea weevils, Yellow striped armyworms	6	
	SPECIFIC DIRECTIONS: Observe plant response precautions.		

TREE FRUIT AND NUT CROPS

All dosages refer to teaspoonfuls of this product per gallon of water. Use sufficient spray gallonage to obtain thorough coverage. Do not exceed maximum rate of this product per gallon of spray. (One teaspoonful equals 0.17 fluid ounces or 5 milliliters. Three teaspoonfuls equal one tablespoonful).

Crops	Teaspoons per Gallon	PHI (Days)
Apples; easily thinned	1 to 2	3
Apples; difficult to thin	2 to 4	
SPECIFIC DIRECTIONS: Apply 1 full coverage dilute spray between 10 and 25 days after full bloom. If factors such as tree age, variety, nutrition, previous crop, pruning, bloom and degree of set favor excessive fruit thinning with this product, exercise caution to avoid possible yield reduction.		
For easily thinned varieties including Cortland, Grimes, Jonathan, McIntosh, Orleans, Rome Beauty, Puritan, Red Delicious, Winesap and Yellow Newton.		
For difficult to thin varieties including Baldwin, Ben Davis, Duchess, Early McIntosh, Golden Delicious, Lady Apple, Northern Spy, Rhode Island Greening, Steele Red, Turley, Wealthy, Yellow Transparent and York Imperial.		

9/14

Crops	Insects	Teaspoons Per Gallon	PHI (Days)
Almond	Fruittree leafrollers, Peach twig borers, San Jose scale	4	14
	SPECIFIC DIRECTIONS: Apply in "popcorn" or petal fall stages and again when the May brood of the Peach twig borer begins to hatch or thereafter as needed.		
	Navel orangeworms	4	28
	SPECIFIC DIRECTIONS: Time early and mid-season application to correspond to moth flight peaks. Make a late season application at initiation of hull split or up to 10% hull split. Do not apply more than 3 fluid ounces per 430 square feet per application of this product		
Apples, Pears	Apple aphids, Apple rust mites, Applesuckers, Bagworms, California pearslugs (Pear sawflies), Codling moths, Eye-spotted bud moths, Green fruitworms, Lecanium scales, Lesser appleworms, Lygus bugs, Orange tortrix, Oystershell scale, Pear leaf blister mites, Pear psylla, Pear rust mites, San Jose scale, Tentiform leafminers, Woolly apple aphids	3 to 4	3
	WEST OF THE ROCKY MOUNTAINS: To avoid undesired apple thinning, delay use at least 30 days after full bloom. For Psylla control apply when eggs hatch or young nymphs are present.		
	EAST OF THE ROCKY MOUNTAINS: To avoid undesired apple thinning, delay use until at least 30 days after full bloom.		
Apples, Pears	Apple aphids, Apple mealybugs, Codling moths, White apple leafhoppers	2	3
	EAST OF THE ROCKY MOUNTAINS: To avoid undesired apple thinning, delay use until at least 30 days after full bloom.		
	Apple maggots, Apple rust mites, Bagworms, Eastern tent caterpillars, European apple sawflies, Eyespotted bud moths, Forbes scale, Fruittree leafrollers, Green fruitworms, Japanese beetles, Lecanium scales, Lesser appleworms, Oystershell scale, Pear psylla, Pear leaf blister mites, Pear rust mites, Periodical cicadas, Plum curculios, Red-banded leafrollers, Rosy apple aphids, San Jose scale, Tarnished plant bugs, Tentiform leafminers, Woolly apple aphids, Yellow-headed fireworms	4	3
SPECIFIC DIRECTIONS: For optimum Scale control, apply when crawlers are present.			
Apricots, Nectarines, Peaches	Apple pandemis, Codling moth, Cucumber beetles, European earwig, Fruittree leafroller, Japanese beetle, June beetle, Lecanium scales, Lesser peachtree borer, Olive scale, Orange tortrix, Oriental fruit moth, Peach twig borer, Periodical cicada, Plum curculio, Red-banded leafroller, San Jose scale, Tarnished plant bug, Tussock moth, Variegated leafroller	4	3
	SPECIFIC DIRECTIONS: Do not apply more than 4 fl. oz. of this product per 430 sq. ft. per application to apricots. For optimum Scale control, apply when crawlers are present. Thoroughly spray limbs and trunks weekly during moth flight.		

10/14

Crops	Insects	Teaspoons Per Gallon	PHI (Days)
Cherries, Plums, Prunes	Black cherry aphid, Brown soft scale, Cherry fruitworm, Cherry maggot, European earwig, Eyespotted bud moth, Forbes scale, Fruitree leafroller, Green fruitworm, Japanese beetle, Lecanium scales, Lesser peachtree borer, Mealy plum aphid, Oystershell scale, Peach twig borer, Plum curculio, Prune leafhopper, Redbanded leafroller, Rose chafer, San Jose scale, Variegated leafroller	4	3
	Codling moth, Eastern tent caterpillar, Orange tortrix, Tussock moth	3	
	SPECIFIC DIRECTIONS: Do not apply more than 4 fl. oz. of this product per 430 sq. ft. per application. For optimum Scale control, apply when crawlers are present. For Lesser peachtree borer control, thoroughly spray limbs and tree trunks weekly during moth flight.		
Citrus fruit (such as citron, citrus, grapefruit, hybrids, kumquats, lemons, limes, oranges, tangelos and tangerines)	Avocado leafroller, California orangeog, Citrus cutworm, Citrus root weevil, Fruitree leafroller, Orange tortrix, Western tussock moth, West Indian sugarcane borer (adult)	4	5
	Black scale, Brown soft scale, California red scale, Citricola scale, Citrus snow scale, Yellow scale	3 to 4	
	SPECIFIC DIRECTIONS: Do not apply more than 13 fl. oz. of this product per 430 sq. ft. per application. Do not apply less than 10 gallons of dilute spray mixture per mature tree. May be mixed with petroleum oils commonly used on citrus.		
Filbert	Filbert aphid, Filbert leafroller, Filbert worm	4	14
	SPECIFIC DIRECTIONS: Apply when Leafroller eggs are hatching. Repeat on first appearance of adult Filbert moths and again 3 to 4 weeks later.		
Olives	Olive scale	3 to 4	14
	SPECIFIC DIRECTIONS: For optimum Scale control, apply mixture when crawlers are present. Do not exceed 2 applications per year. Do not apply more than 9.6 fl. oz. of this product per 430 sq. ft. per application.		
Pecans	Black margined aphid, Fall webworm, Hickory shuck-worm, Lesser webworm, Pecan leaf phyloxera, Pecan nut casebearer, Pecan spittlebug, Pecan weevil, Twig girdler, Walnut caterpillar	4 to 10	14
	SPECIFIC DIRECTIONS: Do not apply more than 5 fl. oz. of this product per 430 sq. ft. per application.		
Walnut	Calico scale, European fruit lecanium, Filbert worm, Fruitree leafroller, Frosted scale	2	14
	Codling moth	2	14
	SPECIFIC DIRECTIONS: Apply 3 fl. oz. of this spray product per 430 sq. ft. for mature trees. For Codling moth, apply first spray when average cross-sectional diameter of developing nuts is 1/2 to 3/4 inch. Repeat during middle or late June as needed.		
	European earwig	8	14
SPECIFIC DIRECTIONS: Spray tree trunks to point of runoff.			

11/14

SMALL FRUIT CROPS

Recommended dosages refer to teaspoonfuls of this product per gallon of water. Use sufficient spray gallonage to obtain thorough coverage. Do not exceed maximum rate of this product per gallon of spray. (One teaspoonful equals 0.17 fluid ounce or 5 milliliters. Three teaspoonfuls equal one tablespoonful.)

Crops	Insects	Teaspoons Per Gal.	PHI (Days)
Blackberries, Dewberries (Including boysenberries and loganberries), Raspberries	European raspberry aphid, Japanese beetle, Leafhoppers, Leafrollers, Rose chafer, Snowy tree cricket	4 to 8	7
	Omnivorous leafroller, Raspberry sawfly	8	
SPECIFIC DIRECTIONS: CA only.			
Blueberries	Blueberry maggot, Cherry fruitworm, Cranberry fruitworm, European fruit lecanium, Japanese beetle	6	7
	SPECIFIC DIRECTIONS: Apply 3 weeks before harvest and repeat as necessary.		
Cranberries	Cranberry fireworms, Cranberry fruitworms, Cutworms, Japanese beetle, Leafhopper, Rose chafer	6 to 12	7
	SPECIFIC DIRECTIONS: CAUTION. May kill shrimp and crabs. Do not use in areas where these are important resources. Apply in late bloom and as needed at 7 to 10 day intervals.		
Grapes	European fruit lecanium, Grape leaf folder, Grape leafhopper, Western grapeleaf skeletonizer, Western yellowstriped armyworm	4 to 8	7
	Cutworms, Eightspotted forester, Grape berry moth, Japanese beetle, June beetle, Orange tortrix, Omnivorous leafroller, Redbanded leafroller, Saltmarsh caterpillar	8	
	SPECIFIC DIRECTIONS: Apply before first brood Leaf folder larvae emerge from rolls.		
Strawberries	Flea beetles, Meadow spittlebug, Omnivorous leaf tier (Strawberry fruitworm), Strawberry leafroller, Strawberry weevil	4 to 8	7
	SPECIFIC DIRECTIONS: This product may injure Early Dawn and Sunrise varieties on the Delmarva Peninsula.		

12/14

TREES AND ORNAMENTALS

For dilute spray applications to trees (including shade trees, shelter belts, plantations, parks and recreational areas), ornamentals, woody plants and shrubs, apply the specified dosage per 100 gallons of water in sufficient spray volume to provide thorough coverage. (One teaspoonful equals 0.17 fluid ounce of 5 milliliters. Three teaspoonfuls equal one tablespoonful).

Crops	Insects	Teaspoons Per Gal.
<p>GROUND APPLICATION: Trees (including shade trees, shelter belts, plantations, parks and recreational areas) Ornamentals (including roses, flowers and other herbaceous plants) Woody plants and shrubs</p>	<p>Ants, Apple aphid, Armyworm, Azalea leafminer, Bagworms, Birch leafminer, Blister beetle, Boxelder bug, Boxwood leafminer, Brown tail moth, Cankerworms, Catalpa sphinx, Chiggers, Cooley spruce gall aphid, Cutworms, Cypress tip moth, Douglas fir tussock moth, Easter spruce gall aphid, Elm leaf aphid, Elm leaf beetle, Elm spanworm, Eriophyid mites, European pine shoot moth, Fall armyworm, Flea beetles, Fuller rose beetle, Gall midges, Gall wasps, Green striped mapleworm, Grasshoppers, Gypsy moth, Hackberry nipple gall maker, Holly bud moth, Holly leafminer, Jackpine budworm, Japanese beetle, Jeffrey pine needleminer, June beetle, Lace bugs, Leafhoppers, Leafrollers, Locust borer, Mealy bugs, Maple leafcutter, Mimosa webworm, Nantucket pinetip moth, Oak leafminers, Oak leaf skeletonizer, Oakworm complex, Oleander caterpillar, Oliver ash borer, Orange striped oakworm, Orange tortrix, Periodical cicada, Pine sawfly, Pine spittle bug, Pitch pine tip moth, Plant bugs, Poinsettia hornworm, Psyllids, Puss caterpillar, Redhumped oakworm, Rose aphid, Rose chafer, Roseslug, Saddled prominent, Sawflies (exposed). Scale insects, Sowbugs, Spiny elm caterpillar, Springtails, Spruce budworm, Spruce needleminer, Subtropical pine tip moth, Tent caterpillars, Thorn bugs, Thrips (exposed), Ticks, Tussock moth, Walnut caterpillar, Webworms, Western hemlock looper, Western spruce budworm, Willow Leaf beetles, Yellow poplar weevil</p>	<p>4</p>
	<p>SPECIFIC DIRECTIONS: Observe plant response precautions. Apply dilute sprays to obtain thorough coverage of upper and lower leaf surfaces. To control scale insects, treat trunks, stems and twigs in addition to plant foliage. For optimum worm control, treat when in early instars. Addition of a sticker may improve residual control.</p>	
	<p>Ips engraver beetles, Mountain pine beetle, Roundheaded pine beetle, Western pine beetle</p>	<p>13.3 oz./gal.</p>
	<p>SPECIFIC DIRECTIONS: Effective as a preventative treatment only Repeat annually as required to prevent Beetle attacks. Apply 1 gallon of spray per 50 sq. ft. of bark in late May to early July, or prior to Beetle attack. Treat tree trunks from ground level up, until trunk diameter is less than 5 inches.</p>	

TURFGRASS

Sites	Insects	Specific Directions
<p>Lawns and Recreational Areas (including turf, golf courses and parks)</p>	<p>Ants, Armyworm, Bluegrass billbug, Centipedes, Chiggers, Cutworms, Earwigs, Essex skipper, European chafer, Fall armyworm, Fiery skipper, Fleas, Grasshoppers, June beetle, Leafhoppers, Lucerne moth, Millipedes, Mosquitoes, Sod webworm (Lawn moths), Sowbugs, Springtails, Ticks, Yellow striped armyworm</p>	<p>Use 2 quarts of this product in 150 to 200 gallons of spray mixture per 5,000 square feet of established lawn, recreational area, roadway or path border. For best results, mow law and apply after wetting or rain to ensure good penetration of turf. Garden hose or pressure applications may be used. Repeat 2 or 3 weeks later if necessary.</p>
	<p>Cinch bugs, White grubs</p>	<p>Use 3 quarts of this product in 150 to 200 gallons of spray per 5,000 square feet.</p>

13/14

MOSQUITO CONTROL

For dilute ground spray applications to trees (including shade trees, shelter belts, plantations, parks and recreational areas), ornamentals, woody plants and shrubs, apply the specified dosage per 1 gallon of water. Avoid direct application to lakes, streams and ponds.

Sites	Amount Per Gallon	Specific Directions
Yards and Recreational Areas	1 to 2 tbsp./gal. 16 oz./gal.	ADULT MOSQUITOS: Caution, May kill shrimp and crabs. Do not use where these are important resources. Treat shrubbery and areas where adult mosquitoes congregate. Treat when adult mosquitoes are active in early mornings or late evening. Repeat at 7 to 10 day intervals. For residual control in sub-tropical regions apply 4 gallons of prepared spray per 2,000 square feet of surface areas. Repeat in 3 to 6 months or when necessary.

**PEST CONTROL AROUND BUILDINGS
LIMITED TO PEST CONTROL OPERATORS ONLY**

Pests	Amount Per Gallon	Specific Directions
Ants, Cockroaches	17 oz./ gal.	For use in and around buildings such as homes, apartments, warehouses, barns and municipal and recreational areas. Apply as a coarse wet spray or with a paint brush to outdoor sleeping quarters of pets, outside perimeter of dwellings and other areas where insects tend to congregate. Do not use in food areas or food handling establishments, restaurants or other areas where food is commercially prepared or processed. Do not use in serving areas while food is exposed.
Brown dog ticks, Earwigs, Fleas, Millipedes, Silverfish	7 oz./gal.	

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

STORAGE INSTRUCTIONS: Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source. Avoid storage at high temperatures. Do not stack over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container lightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Avoid contamination with acids and alkalis. Store in original containers only. If the contents are leaking or material is spilled, follow these steps:

1. Contain spill, absorb with a material such as sawdust, clay granules, or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with soap and water to remove remaining pesticide.
4. Following washing with clean water rinse.
5. Place a leaking container in a plastic tub and transfer the contents as soon as possible to an empty original container.
6. Do not allow runoff to enter sewer or contaminate water supplies.
7. Dispose of wastes as indicated below:

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

14/14

WARRANTY – CONDITION OF SALE

RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. In no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.