PM 19 769-919 Page 1 of 4 SSB317 300/17

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APR 14 1997

H.R. McLane
7210 Red Road
Suite 206
Miami, FL 33143-5321

Subject: Sevin® Liquid Home and Garden Insect Spray
EPA Registration No. 769-919
Amendment dated January 21, 1997
Response to Agency letter dated 10/1/96

Dear Mr. McLane:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that you:

1. Make the following changes to your label:

a) In the DIRECTIONS FOR USE, delete the sentence "Repeat as necessary to maintain control, unless spray interval is specified."

b) In the Directions for Use on ASPARAGUS, delete the sentence "Do not treat more than once every 3 days."

c) In the Directions for Use on LETTUCE, change "...treat on a 5 to 7 day schedule..." to "...treat on a 7 day schedule..."

d) In the Directions for Use on CORN, change "...apply at 1 to 6 day intervals..." to "...apply at 7 day intervals..."

2. Submit one copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of

CONCURRENCES

SYMBOL							
SURNAME							
DATE							

EPA Form 1320-1A (1/90) Printed on Recycled Paper OFFICIAL FILE COPY

BEdwards A:769/919.1 4/13/97

the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

for Dennis H. Edwards, Jr.
Product Manager (19)
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure

SEVIN®
brand carbaryl insecticide
LIQUID
HOME and GARDEN INSECT SPRAY

CONTROLS INSECTS ON VEGETABLES, FRUITS & NUTS LAWN & ORNAMENTAL INSECTS, IMPORTED FIRE ANTS, LYME DISEASE VECTOR TICKS, MOSQUITOES, PEST CONTROL AROUND BUILDINGS, POULTRY INSECTS, HOSE-END-SPRAYER APPLICATION

Also See Supplemental Labeling For Additional Product Uses

ACTIVE INGREDIENT:

Carbaryl:1-Napthyl N-methylcarbamate - - - -	21.3 %
INERT INGREDIENTS: - - - - - - - - - -	78.7 %
Contains 2 lbs. Carbaryl per gallon Total	100.0 %

SEVIN® is a registered Trademark of Rhone Poulenc for Carbaryl insecticides.

KEEP OUT OF REACH OF CHILDREN
CAUTION

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

STATEMENTS OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician of Poison Control Center immediately. Induce vomiting by giving victim 1 or 2 glasses of water and touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person. IF IN EYES: Flush eyes with plenty of water. Get medical attention immediately. IF ON SKIN: Wash thoroughly with soap and water. IF INHALED: Remove victim to fresh air. Apply Artificial Respiration if indicated. NOTE TO PHYSICIAN: Carbaryl is a carbamate insecticide, which is a cholinesterase inhibition. Over exposure to this substance may cause toxic signs and symptoms due to the stimulation of the cholinergic nervous system. These effects of over exposure are spontaneously and rapidly reversible. See; NOTE TO PHYSICIAN below.

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: May be harmful if swallowed. Avoid breathing spray mist or vapors. Do not take internally. Avoid contact with skin, eyes or clothing. Wear regular long-sleeved work clothing. Change to clean clothing daily. Wash hands and face before eating. Wash thoroughly after handling. NOTE TO PHYSICIAN: Also observe NOTE in Statements of Practical Treatment. Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent over atropinization. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30 to 60 minutes to maintain the effect for at least 12 hours. Dosage for children should be appropriately reduced. Complete recovery from over exposure is to be expected within 24 hour. Narcotics and other sedatives should not be used. Further, drugs like 2-PAM are not recommended unless organophosphate intoxication is also suggested.

USER SAFETY REQUIREMENTS

Wear long-sleeved shirt, long pants, shoes plus socks and household latex or rubber gloves when mixing and applying product. Wear a hat and eye protection when making overhead applications. Remove clothing immediately if pesticide soaks clothing. Change clothing as soon as possible after use. Wash the outside of gloves before removing. As with any pesticide product, wash hands thoroughly immediately after handling and before eating, smoking or using toilet. Do not allow children or pets to contact treated area until sprays have dried.

EPA Reg. No. 769-919 EPA Est. No. 769-GA-1

Net Contents 1 Pint

SURECO, INC.

P.O. Box 938 - Fort Valley, GA 31030

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic and estuarine invertebrates. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high water mark, except under forest canopy. Do not apply when weather conditions favor drift from area treated. Do not contaminate water when disposing of equipment washwaters. 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. Do not use when value of bees as pollinators is more important than insect control. Before applying, warn beekeepers to locate hives beyond bee flight range until 1 week after application or to take equally effective precautions.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. STORAGE: Store product in its original labeled container in a cool, dry, locked place out of reach of children. Do not store in areas where temperatures frequently exceed 100° F. The product may be used following exposure to several freeze/thaw cycles. DISPOSAL: Do not reuse empty container. Wrap empty container in several layers of newspaper and discard in trash.

FOR FRUITS AND VEGETABLES

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 reentering. For trees taller than 10 feet consider hiring a licensed professional. Spray thoroughly to wet upper and lower surfaces, stem and branches. Do not repeat applications more than once a week.

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. Shake containers prior to use. Do not reuse empty containers or measuring devices for other purposes. Apply with a pressure, power, pump or hose-end sprayer to give thorough coverage when insects or damage appear. Repeat as necessary to maintain control, unless spray interval is specified. Plant Response Precautions: Carbaryl will injure Boston Ivy, Virginia Creeper and Maidenhair fern. During early season it may injure Virginia and Sand Pine species.

VEGETABLE CROPS

All spray rates are underlined as; - (x) tsps./gal. Each rate follows the specific insect names as listed. Do not over dose.

ASPARAGUS: Asparagus Beetle, Grasshoppers - 4 to 8 tsps./gal. Pre-harvest interval - 1 day. Apache Cicada, Asparagus Beetle - 8 to 16 tsps./gal. Post harvest application only. Treat ferns or brush growth. Do not treat more than once every 3 days.

BEANS: BLACK EYED PEAS, COWPEAS, CROWDER OR SOUTHERN PEAS, DRY BEANS, GREEN BEANS, LIME BEANS, NAVY BEANS, AND SNAP BEANS): Blister Beetle, Mexican Bean Beetles, - 2 to 4 tsps./gal.; Alfalfa Caterpillar, Bean Leaf Beetle, Cucumber Beetle, Flea Beetles, Green Cloverworm, Japanese Beetle, Leafhoppers, Three Cornered Alfalfa Hopper, Thrips, Velvetbean Caterpillar, Western Bean Cutworms - 4 tsps./gal. Armyworms, Cutworms, European Corn Borer, Fall Armyworms, Grasshoppers, Tarnished Plant Bug, Webworms - 4 to 6 tsps./gal. Corn Earworm, Cowpea Curculio, Lima Bean Pod Borer, Lygus Bugs, Stink Bugs - 8 tsps./gal. Pre-harvest intervals - 0 days (all except cowpeas), 3 days for cowpeas and peas.

BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CARROTS, CAULIFLOWER, CELERY, CHINESE CABBAGE, COLLARDS, DANDELION, ENDIVE (ESCAROLE), GARDEN BEET, HANOVER SALAD, HORSERADISH, KALE, KOHLRABI, LETTUCE, MUSTARD GREENS, OKRA, PARSNIPS, PARSLEY, RADISHES, RUTABAGAS, SALSIFY, SPINACH, SWISS CHARD, TURNIPS: Flea Beetles, Harlequin Bugs, Leafhoppers - 2 to 4 tsps./gal. Aster Leafhopper, Grasshoppers, Lygus Bugs, Spittlebugs - 4 to 6 tsps./gal.; Armyworm, Corn Earworm, Fall Armyworm, Imported Cabbage worm, Stink Bug, Tarnished Plant Bug - 4 to 8 tsps./gal.: Pre-harvest interval days: 0 - Carrots; 3 days - Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Garden Beet Roots, Head Lettuce, Horseradish, Kohlrabi, Parsnips, Radishes, Rutabagas, Salsify Roots, and Turnip Roots; 14 days - Chinese Cabbage, Celery, Collards, Dandelion, Endive (Escarole), Garden Beet tops, Hanover Salad, Kale, Mustard Greens, Leaf Lettuce, Parsley, Salsify tops, Spinach, Swiss Chard, and Turnip tops.

NOT FOR USE ON CELERY IN CALIFORNIA. Observe plant response precautions. Lettuce: treat on a 5 to 7 days schedule after heads begin to

CORN: Armyworm, Chinch Bug, Corn Earworm, Corn Rootworm Adults, European Corn Borer, Fall Armyworm, Flea Beetles, Grasshoppers, Japanese Beetle, Leafhoppers, Sap Beetle, Southern Corn Borer - 4 to 8 tsps./gal. OBSERVE BEE CAUTION. For insects attacking silks and ears, apply at 1 to 6 days intervals starting when first silks appear and continuing until silks begin to dry. For larvae in whorl and foliage feeders, apply as necessary. Optimum timing and good coverage are essential for effective control. Western Bean Cutworms - 8 tsps./gal. Treat when infestation averages 15% and at 90 to 100 % tassel emergence. Treatment after 100% silk emergence will reduce effectiveness. Pre-harvest interval - 0 days.

CUCUMBER, MELONS, PUMPKINS, SQUASH: Pickleworm, Melonworms - 2 to 4 tsps./gal.: Cucumber Beetles, Flea Beetles, Leafhoppers, Squash Bugs - 4 tsps./gal. Pre-harvest intervals - 0 days.

POTATO, TOMATO, EGGPLANT, PEPPER, PEANUTS, PEAS: Bean Leaf Beetles, Blister Beetles, Colorado Potato Beetle, Cucumber Beetles, Flea Beetles, Green Cloverworm, Japanese Beetles, Leafhoppers, Mexican Bean Beetles, Red-necked Peanutworm, Three Cornered Alfalfa Hopper, Thrips, Velvetbean Caterpillar - 4 tsps./gal.; Alfalfa Caterpillar, Armyworm, Corn Earworms, Grasshoppers, Pea Leaf Weevil, Pea Weevil, Webworms, Yellowstriped Armyworm - 6 tsps./gal. European Corn Borer, Fall Armyworm, Lace Bugs, Stink Bugs, Tarnished Plant Bug, Tomato Hornworm, Tomato Pinworm - 4 to 8 tsp./gal. Cutworms, White fringed Beetle adults - 6 to 8 tsps./gal. Pre-harvest Intervals - Peas; 3 days all others 0 days.

SWEET POTATO: Corn Earworm, Cucumber Beetles, Flea Beetles, Grasshoppers, Sweet Potato Hornworm, Tortoise Beetles - 4 to 8 tsps./gal. NOT FOR USE IN CALIFORNIA. Apply as a foliar spray as needed. Yellowstriped Armyworm - 8 tsp./gal. Sweet Potato Weevil - 4 to 8 tsps./gal. Full coverage is essential. Use lower rate on young plants and higher rate on mature plants. Pre-harvest interval - 0 days.

FRUIT AND NUT CROPS

APPLE THINNING: 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 carbaryl, exercise caution to avoid possible yield reduction. Pre-harvest interval - 1 day.

APPLES ONLY Apply 1 to 2 tsp./gal. for easily thinned varieties including Cortland, Grimes, Jonathan, McIntosh, Orleans, Rome Beauty, Puritan, Red Delicious, Winesap, Yellow Newton. Apply 2 to 4 tsps./gal. for difficult to thin varieties including Baldwin, Northern Spy, Rhode Island Greening, Steele Red, Turley, Wealthy, Yellow Transparent and York Imperial.

ALMOND: Peach Twig Borer, San Jose Scale, Fruittree Leafroller - 4 tsps./gal. 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 Orangeworm - 4 tsps./gal. Time early and mid season applications to correspond to moth flight peaks. Make a late season application at initiation of hull split or up to 10% hull split.
Pre-harvest interval - 28 days.

APPLE, PEARS: Apple Aphid, Apple Maggot, Apple Mealybug, Apple Rust Mite, Apple Sucker, Bagworms, California Pear Slug,(Pear Sawfly), Codling Moth, Eastern tent Caterpillar, European Apple Sawfly, Eyespotted Bud Moth, Forbes Scale, Fruittree Leafroller, Green Fruitworm, Japanese Beetles, Lecanium Scale, Lesser Appleworm, Orange Tortrix, Oystershell Scale, Pear Leaf Blister Mite, Pear Psylla, Pear Rust Mite, Periodical Cicada, Red Banded Leafroller, Rosy Apply Aphid, San Jose Scale, Tarnished Plant Bug, Tentiform Leafminer, White Apple Leafhoppers, Wooly Apple Aphid, Yellowheaded Fireworm - 4 tsps./gal. Pre-harvest intervals - 1 day. To avoid undesired apple thinning, delay use until at least 30 days after full bloom. For psylla control, apply when eggs hatch or young nymphs are present. For optimum scale control, apply when crawlers are present.

BLACKBERRIES, RASPBERRIES, DEWBERRIES (Boysenberries, Loganberries), GRAPES, STRAWBERRIES: European Fruit Lecanium, European Raspberry Aphid, Grape Leafroller, Grape Leaffolder, Japanese Beetle, Leafhoppers, Leafrollers, Meadow Spittlebug, Omnivorous Leafiler, (Strawberry fruitworm), Rose Chafer, Snowy Tree Cricket, Strawberry Weevil, Western Grapeleaf Skeletonizer, Western Yellowstriped Armyworm - 4 to 8 tsps./gal.: Cutworms, Eight Spotted Forester,

Grape Berry Moth
ler, Orange Tortri
Caterpillar - 8 tsps
from rolls.

STRAWBERRIES
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senberries and Lo

BLUEBERRIES: E
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days.

CITRUS FRUITS:
gerines, Citrus Cit
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ler, Orange Tortrix
Borer(Adults) - 4 ts
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Pre-harvest interva
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monly used on citr

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harvest interval - 1
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FILBERTS: Filbert
Pre-harvest interva
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Bud Moth, Forbes S
Beetles, June Beetl
Plum Aphids, Olive
Twig Borer, Period
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Variegated Leafrolle
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control, apply when
control spray limbs
Pre-harvest interval
apricots and nectar

PECANS: Black Ma
Lesser Webworm,
Spittlebugs, Pecan
gal. Pre-harvest int

WALNUT: Calico
Filbertworm, Fruittr
Moth apply when av
4 inch. Repeat durin
- 8 tsps./gal. Spray
days. (919-amdA.P

Supplemental / Correlative Labeling.
Refer to Labeling Affixed to Container for; Precautionary and Practical Treatment Statements; Additional Directions For Use.

SEVIN®
brand carbaryl insecticide
LIQUID
HOME and GARDEN INSECT SPRAY

CONTROLS INSECTS ON VEGETABLES, FRUITS & NUTS LAWN & ORNAMENTAL PLANTS, IMPORTED FIRE ANTS, LYME DISEASE VECTOR TICKS, ADULT MOSQUITOES, PEST CONTROL AROUND BUILDINGS, POULTRY INSECTS,

DIRECTIONS FOR USING A HOSE-END-SPRAY APPLICATOR

ACTIVE INGREDIENT:
Carbaryl:1-Napthyl N-methylcarbamate - - - - 21.3%
INERT INGREDIENTS: - - - - - - - - - - - - 78.7%
Total 100.0%

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.

EPA Reg. No. 769-919 EPA Est. No. 769-GA-1

SURECO, INC.
P.O. BOX 938 - FORT VALLEY GA 31030

TREES AND ORNAMENTALS

For dilute spray applications to trees, (including shade trees, shelter belts, plantations, parks and recreational areas), ornamental, woody plants and shrubs, apply the specified dosage per gallon of water in sufficient spray volume to provide thorough coverage. (6 teaspoonfuls equal 1 fluid ounce.)

FOR TREES, WOODY PLANTS & SHRUBS apply with pressure, power, pump, or hose-end sprayer. Do not treat Boston Ivy, Virginia Creeper, Maiden Hair fern; nor Virginia or Sand Pine early in season.

INSECTS CONTROLLED ON TREES AND ORNAMENTALS

Ants, Apple Aphid, Armyworms, Azalea Leafminer, Bagworms, Birch leafminer, Blister Beetles, Boxelder Bugs, Boxwood Leafminer, Browntail Moth, Cankerworms, Catalpa Sphinx, Chiggers, Cooley Spruce Gall Aphid, Cutworms, Cypress Tip Moth, Douglas Fir Tussock Moth, Eastern Spruce Gall Aphid, Elm Leaf Aphid, Elm Leaf Beetles, Elm Spen Worm, Eriophyid Mites, European Pine Shoot Moth, Fall Armyworm, Flea Beetles, Fuller Rose Beetle, Gall Midges, Gall Wasps, Green Striped Mapleworm, Grasshoppers, Gypsy Moth, Hackberry Nipplegall, maker, Holly Bud Moth, Holly Leafminers, Jackpine Budworm, Japanese Beetles, Jeffrey Pine Needleminer, June Beetles, Lace Bugs, Leafhoppers, Leafrollers, Locusts Borer, Maple Leafcutter, Mealy Bugs, Mimosa Webworms, Nantucket Pine Tip Moth, Oak Leafminers, Oak Leaf Skeletonizer, Oakworm complex, Oleander Caterpillar, Olive Ash Borer, Orange Striped Oakworm, Orange Tortrix, Periodical Cicada, Pine Sawfly, Pine Spittlebug, Pitch Pine Tip Moth, Plant Bugs, Poinsettia Hornworm, Psyllids, Puss Caterpillar, Redhumped Oakworm, Rose Aphid, Rose Chafer, Rose Slug, Saddled Prominent, Sawflies (exposed), Scale Insects, Sowbugs, Spiny Elm Caterpillar, Springtails, Spruce Budworm, Spruce Needleminer, Subtropical Pine Tip Moth, Tent Caterpillar, Thorn Bugs, Thrips (exposed), Ticks, Walnut Caterpillar, Webworms, Western Hemlock Looper, Western Spruce Budworm, Willow Leaf Beetles, Yellow Poplar Weevil - Use 4 tbsp./gal.

Observe Plant response precautions. Apply dilute spray 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 control treat when worms are small. Addition of a sticker may improve residual control.

For Ips Engraver Beetles, Mountain Pine Beetle, Roundheaded Pine Beetle, Western Pine Beetle - use 13.3 fluid ounces per gallon of water. Effective as a preventive treatment only. Repeat annually as required to prevent beetle attacks. Apply 1 gallon of spray per 50 square feet of bark in late May to early June, or prior to beetle attack. Treat tree trunk from ground level up until trunk diameter is less than 5 inches.

LAWN AND RECREATIONAL AREAS TURF GRASSES

INSECTS: Ants, Armyworms, Bluegrass Billbugs, Centipedes, Chiggers, Chinch Bugs, Cutworms, Earwigs, Essex Skipper, European Chafer, Fall Armyworm, Fiery Skipper, Fleas, Grasshoppers, June Beetles, Leafhoppers, Lucerne Moth, Millipedes, Mosquitoes, Sod Webworms, Sow bugs, Springtails, Ticks, White Grubs, Yellow-striped Armyworm - use 12 fl. oz. per 1000 sq.ft. (16 qts. per acre) of turf grass. Make application in sufficient spray volume for thorough coverage and turf thatch penetration. Repeat as necessary.

For Armyworms, Cutworms, Fall Armyworms, and Sod Webworms control do not irrigate treated areas following insecticide application.

For Chinch Bugs control treat entire turf grass area rather then just damaged areas. Irrigation of turf grass area before insecticide application will aid in penetration into turf grass.

For White Grub control applications should be made when grubs are feeding near the soil surface, usually during late March through May, or July to early September, or as recommended by local Agricultural Extension Service agents. Water or irrigate turf grasses thoroughly soon after treatment.

IMPORTED FIRE ANTS

Use 2 tablespoons (1 fluid ounce) per gallon of water. Apply a total of 2 gallons of the diluted solution over the surface of each mound, or at least 1 quart per 6 inches of mound diameter, using bucket, can or other appropriate equipment. Thoroughly wet mound and surrounding area to a 4 ft. diameter (12 sq.ft.). Do not disturb mounds prior to treatment. Pour solution from a height of about 3 feet to give sufficient force to break mound apex and flow into ant tunnels. For best results apply in cool weather, 65 to 80 degrees F, or in early morning or late evening hours. Repeat application if mound activity resumes after 10 days. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.

CONTROL OF TICKS THAT VECTOR LYME DISEASE

May be used for control of juvenile and adult bodes spp. (Deer Tick and Black Legged Tick) and Amblyommia spp. ticks (Lone Star Ticks) which vector Lyme Disease. Mix 2 tbsp./gal. and begin spray applications to lawns, shrub beds, ornamental plantings, wooded areas and around outside perimeters of home and other buildings in late spring or early summer(May/June) to control juvenile ticks (larvae and nymphs).. Do not make spot applications. Treat entire lawn and perimeter wooded areas and property boundaries where exposure to ticks may occur. Control of adult ticks can be achieved with late summer and fall applications (Aug/Sept.) at the same rate. Ticks may be reintroduced from surrounding areas on host animals. Repeat treatment at 3 to 4 week intervals to maintain adequate control levels.

MOSQUITO CONTROL

YARDS and RECREATIONAL AREAS: Adult Mosquitoes - Precautions - May kill shrimp and crabs. Do not use in areas where these are important resource. See Bee Precautionary Statement - Avoid direct application to lakes, streams and ponds.

For dilute-spray ground applications to trees (including shade trees, shelter belts, plantations, parks and recreational areas), ornamental, woody plants and shrub, apply 1 to 2 tbsp./gal. Treat shubbery and areas where adult mosquitoes congregate. Treat when adult mosquitoes are active in early morning or late evening. Repeat at 7 to 10 day intervals. For residual control in subtropical regions use 16 fl. oz. per gallon of water and apply 4 gallons of prepared spray per 2000 sq.ft. of surface area. Repeat in 3 to 6 months or when necessary.

PEST CONTROL IN AND AROUND BUILDINGS

INSECTS: Brown Dog Ticks, Earwigs, Fleas, Millipedes, Silverfish - 7 ozs./gal. Ants, Cockroaches - 17 ozs./gal. For use in and around buildings such as homes, apartments, warehouses, barns and municipal and recreational areas. Apply as 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 us this product in commercial food areas of food handling establishments, restaurants, or the places where food is prepared and processed. Avoid application to surfaces where visible spray residues are objectionable.

POULTRY INSECT CONTROL

CHICKENS, DUCKS, GEESE, GAME BIRDS, PIGEONS, TURKEYS: Chicken Mites, Fleas, Lice, Northern Fowl Mite, - For use as a direct spray on birds by : 1. Misting with Electric Fog Machine: Mix 20 ounces of this product in 1 gal of water. Use 1 1/2 gallons per 1000 hens in cages, on litter or on slatted floor. Repeat in 4 weeks if necessary, or ... 2. Spraying with knapsack or cylinder type compressed air sprayer: Mix 12 ounces in 5 gallons of spray. Use 1 gallon per 100 hens in cages, on litter or on slatted floor. Repeat in 4 weeks if necessary.

Direct "mist spraying" for chicken mite and fleas is a supplement to spraying insects and buildings for control of these pests. Do not apply to poultry and game birds within 7 days of slaughter.

POULTRY ROOSTS AND BUILDINGS

INSECTS: Bed Bugs, Chicken Mites, Fleas, Lice, Northern Fowl Mite - 5 tbsp./gal. Fowl Tick - 10 ozs./gal. Apply 12 to 25 ounces of spray mixture per 100 sq.ft. of wall, litter or roost surface. Force spray into cracks. Repeat as needed. Avoid contamination of nests, eggs and feeding and watering troughs. Ventilate while spraying. Do not treat premises within 7 days of slaughter. Lesser Mealworm - 33 ozs./gal. Apply 25 ounces of spray mixture per 100 sq.ft. of floor space or litter surface. Repeat as needed. [illegible] 7 days of slaughter.

DIRECTIONS FOR USE NOW FOLLOW FOR USING A HOSE-END SPRAY APPLICATOR

PLANT RESPONSE PRECAUTIONS: Carbaryl will injure Boston Ivy, Virginia Creeper and Maidenhair fern. During early season it may injure Virginia and Sand Pine spp.

HOSE END SPRAYER This product readily disperses in water to form a spray that can be applied with garden hose applicators (hose-end-sprayers) to crops listed. To ensure adequate coverage use moderate to high pressures when applying through hose-end sprayers. Calibrate to deliver 1 fluid ounce per gallon of spray m[illegible]

VEGETABLE CROPS

For control of all the vegetable pests in the following list apply this product in adequate volume to effectively cover both the upper and lower surfaces of the plant.

NOTES: 1) This product is not registered for use on celery and sweet potato in California; 2) Do not treat asparagus more than once every 3 days as excessive residues may result; and 3) The number in parentheses following each vegetable crop grouping refers to the minimum number of days that must be observed between the date of the last application and the date of harvest.

CROPS

Beans Black Eyed Peas, Cowpeas, Crowder or Southern Peas, Dry Beans, Green Beans, Lima Beans, Navy Beans, and Snap Beans): Carrots, Corn, Cucumber, Eggplant, Melons, Okra, Peanuts, Pepper, Potatoes, Pumpkins, Squash: Sweet Potato, Tomato - (0 days until harvest)

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Cowpeas, Garden Beet Roots, Head Lettuce, Horseradish, Kohlrabi, Parsnips, Peas, Radishes, Rutabagas, Salsify Root, Turnip Roots - (3 days until harvest)

Celery, Chinese Cabbage, Collards, Dandelion, Endive (escarole), Garden Beet Tops, Hanover Salad, Kale, Mustard Greens, Leaf Lettuce, Parsley, Salsify Tops, Spinach, Swiss Chard, Turnips Tops - (14 days until harvest)

PESTS

Alfalfa Caterpillar	Grasshoppers	Southwestern Corn Borer
Apache Cicada	Green Cloverworm	Spittlebugs
Armyworm	Harlequin Bug	Squash bugs
Asparagus Beetle	Imported Cabbage worm	Stink Bugs
Aster Leafhopper	Japanese Beetle	Sweet Potato Hornworm
Bean Leaf Beetle	Lace Bugs	Tarnished Plant Bug
Blister Beetle	Leafhoppers	Three Cornered Alfalfa Hopper
Chinch bugs	Lima Bean Pod Borer	Thrips
Colorado Potato Beetle	Lygus Bugs	Tomato Hornworm
Cowpea Curculio	Melonworm	Tomato Pinworm
Cucumber Beetle	Mexican Bean Beetles	Tortoise Beetles
Cutworms	Pea Leaf Weevil	Velvetbean Caterpillar
European Corn Borer	Pea Weevil	Webworms
Fall Armyworms	Pickleworm	Western Bean Cutworms
Flea Beetles	Red Necked Peanut worm	White Fringed Beetle
	Sap Beetles	Yellowstriped armyworm

TREES AND ORNAMENTAL PLANTS

Thorough coverage of upper and lower leaf surfaces and trunks, stems, and twigs is necessary for optimum control of tree and ornamental pests. Apply to each of these areas until spray run-off is observed.

CROPS: Trees (including shade trees, shelter belts, plantations, parks and recreational areas), Ornamentals, (including roses and other herbaceous plants) Woody Plants and Shrubs.

PESTS

Ants	Green Striped Mapleworm	Pitch Pine Tip Moth
Apple Aphid	Grasshoppers	Plant Bugs
Armyworms	Gypsy Moth	Poinsettia Hornworm
Azalea Leafminer	Hackberry Nipplegall Maker	Psyllids
Bagworms	Holly Bud Moth	Puss Caterpillar
Birch Leafminer	Holly Leafminers	Redhumped Oakworm
Blister Beetles	Jackpine Budworm	Rose Aphid
Boxelder Bugs	Japanese Beetles	Rose Chafer
Boxwood Leafminer	Jeffrey Pine Needleminer	Rose Slug
Browntail Moth	June Beetles	Saddle Prominet
Cankerworms	Lace Bugs	Sawflies (exposed)
Catalpa Sphinx	Leafhoppers	Scale insects
Chiggers	Leafrollers	Sowbugs
Cooley Spruce Gall Aphid	Locusts Borer	Spiny Elm Caterpillar
Cutworms	Maple Leafcutter	Springtails
Cypress Tip Moth	Mealy Bugs	Spruce Budworm
Douglas Fir Tussock Moth	Mimosa Webworms	Spruce Needleminer
Eastern Spruce Gall Aphid	Nantucket Pine Tip Moth	Subtropical Pine Tip Moth
Elm Leaf Aphid	Oak Leafminers	Tent Caterpillar
Elm Leaf Beetles	Oak Leaf Skeletonizer	Thorn Bugs
Elm Spen Worm	Oakworm complex	Thrips (exposed)
Eriophyid Mites	Oleander Caterpillar	Ticks
European Pine Shoot Moth	Olive Ash Borer	Walnut Caterpillar
Fall Armyworm	Orange Striped Oakworm	Webworms
Flea Beetles	Orange Tortrix	Western Hemlock Looper
Fuller Rose Beetle	Periodical Cicada	Western Spruce Budworm
Gall Midges	Pine Sawfly	Willow Leaf Beetles
Gall Wasps	Pine Spittlebug	Yellow Poplar Weevil

CONTROL OF TICKS WHICH TRANSMIT LYME DISEASE For control of juvenile and adult bodes spp. ticks (Deer Tick, Bear Tick, and Black Legged Tick) and Amblyommia spp. ticks (Lone Star Ticks). Begin applications in late spring or early summer(May/June). Thoroughly treat entire lawn, perimeter wooded areas, and property boundaries including shrub beds, ornamental plantings, and wooded areas where exposure to ticks may occur. Retreat at 3 to 4 weeks intervals since ticks may be reintroduced from surrounding areas by animals.

FRUIT AND NUT CROPS

For control of all fruit and nut pests listed below, use sufficient spray volume to obtain thorough coverage (spray until run-off). Direct applications toward the lower and upper leaf surfaces, between fruit and nut clusters, and limbs and tree trunk to optimize insect control.

NOTES: 1) To avoid undesired apply thinning, delay use until at least 30 days after bloom; 2) Carbaryl insecticide may injure Early Dawn and Sunrise Strawberries varieties on the Delmarva Peninsula; 3) When used on cranberries; Sevin carbaryl may kill shrimp and crabs; and 4) The number in parenthesis following each fruit and nut crop grouping refers to the minimum number of days that must be observed between the date of the last application and the ate of harvest.

PRE-HARVEST INTERVALS FOR CROPS

Blueberries, Filberts, Pecans, Walnuts - (0 days until harvest)

Apples, Cherries, Cranberries, Peaches, Pears, Plums, Prunes, Strawberries - (1 day until harvest).

Apricots, Nectarines - (3 days until harvest).

Citrus Fruits (such as grapefruit, Lemons, Limes, Oranges, Tangelos, Tangerines, Citrus Citron, Kumquats and Hybrid) - (5 days until harvest)

Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries, Grapes (7 days until harvest). Almonds (28 days until harvest).

PESTS

Apple Aphid	European Fruit Lecanium	Pear Leaf Blister Mite
Apple Maggot	European Raspberry Aphid	Pear Psylla
Apple Mealybug	Eyespotted Bud Moth	Pear Rust Mite
Apple Pandemis	Fall Webworm	Pecan Leaf Phylloxera
Apple Rust Mite	Filbert Aphid	Pecan Nut Casebearer
Apple Sucker	Filbert Leafroller	Pecan Spittlebug
Bagworms	Filbertworm	Pecan Weevil
Black Cherry Aphid	Forbes Scale,	Periodical Cicada
Black margined Aphid	Fruit Tree Leafroller	Plum Curculio
Black Scale	Grape Berry Moth	Prune Leafhopper
Blueberry Maggot	Grape Leafhopper	Raspberry Sawfly
Brown Soft Scale	Grape Leaffolder	Red Banded Leafroller
Calico Scale	Green Fruitworm	Rose Chafer
California Orangedog	Hickory Shuckworm	Rosy Apple Aphid
California Pear Slug	Japanese Beetles	Salt Marsh Caterpillar
California Red Scale	June Beetles	San Jose Scale
Cherry Fruitworm	Leafhoppers	Snowy Tree Cricket
Cherry Maggot	Leafrollers	Strawberry Weevil
Citricola Scale	Lecanium Scale	Tarnished Plant Bug
Citrus Cutworm	Lesser Appleworm	Tentiform Leafminer
Citrus Root Weevil	Lesser Peachtree Borer	Twig Girdler
Citrus Snow Scale	Lesser Webworm	Tussocks Moth
Codling Moth	Meadow Spittlebug	Variegated Leafroller
Cranberry Fireworm	Mealy Plum Aphid	Walnut Caterpillar
Cranberry Fruitworm	Navel Orangeworm	Western Grapeleaf
Cucumber Beetles	Olive Scale	Skeletonizer
Cutworms	Omnivorous Leafler	Western Tussocks Moth
Eastern Tent Caterpillar	Omnivorous Leafroller	West Indian Sugarcane Borer
European Apple Sawfly,	Orange Tortrix	
Eightspotted forester	Oriental Fruit Moth	White Apple Leafhoppers
European Apple Sawfly	Oystershell Scale	Wooly Apple Aphid
European Earwig	Peach Twig Borer	Yellow Head Fireworm

LAWN AND RECREATIONAL AREAS For optimum control of lawn pests it is essential to ensure good penetration of the turf. For best results mow lawn and make applications after watering or rain. Following application, additional watering of lawn will enhance white grub control. For imported Fire Ants control, apply directly to the mound and surrounding areas (do not disturb mounds prior to treatment). Treat new mounds as they appear. A volume of 16 to 24 fluid ounces of this product will cover approximately 3500 sq.ft. when diluted as directed.

PEST CONTROL Apply 16 fluid ounces of this product to cover 3000 sq.ft. (32 fluid ounces per 6,000 sq.ft.) for control of Ants, Armyworms, Bluegrass Billbugs, Centipedes, Chiggers, Chinch Bugs, Cutworms, Earwigs, Essex Skipper, European Chafer, Fall Armyworm, Fiery Skipper, Fleas, Grasshoppers, Green June Beetle Grubs, June Beetles, Leafhoppers, Lucerne Moth, Millipedes, Adult Mosquitoes, Sow bugs, Springtails, Ticks, Yellowstriped Armyworm.

Apply 16 fluid ounces of this product to cover 1,350 sq.ft. (32 fluid ounces per 2,700 sq.ft.) for control of Chinch Bugs, Sod Webworms, Bluegrass Billbugs, European Crane Fly, Fleas, and White Grubs (such as Japanese Beetle, Chafer Beetles, and Phyllophaga spp. larvae.

ADULT MOSQUITO CONTROL For optimum results, treatments should be made in the early morning or late evening when adult mosquitoes are most active. In yards and recreational areas, apply to ornamentals, woody plants, shrubs, and other areas where adult mosquitoes congregate. (NOTE: CARBARYL MAY KILL SHRIMP AND CRABS. OBSERVE BEE CAUTION)

PEST CONTROL AROUND BUILDINGS This product may be used around buildings such as homes, apartments, warehouses, barns and municipal and recreational areas to control pests listed below. Thoroughly wet the outside perimeter of dwellings and other areas where pests tend to congregate. PESTS: Brown Dog Ticks, Earwigs, Fleas, Millipedes.

(919-amdB.PM5/carb use & precautions DCI amd \01-20-97))