

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAIR 18 1994

GENE R. CURRIE IMPERIAL INC. BOX 98 SHENANDOAH, IA 51601

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

page fut 1.

Subject:

Label Amendment Submission of 8/19/93 Response to PR Notice 93-7

EPA Reg. No. 407-383

IMPERIAL SEVIN SUSPENSION

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling AND
- WITHIN one year from date of this acceptance.

Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,

Jim Tompkins, Deputy Chief Registration Support Branch Registration Division (7505W)

Attachment

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division

Gene R. Currie IMPERIAL INC BOX 98 SHENANDOAH IA 51601

Comment for: EPA Reg Nr.407-383
IMPERIAL SEVIN SUSPENSION

The following specific comments pertain to your WPS labeling submission concerning the product cited above:

The glove requirement for "applicators and other handlers" in the "Personal Protective Equipment" section on your proposed labeling is missing or does not match the chemical-resistance category identified on your proposed labeling. Correct the chemical-resistant category statement (if necessary) to state: "Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart." Remove the incorrect glove requirement (if any) and add "Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton." The exact location is shown in Sections A and B on Part 1 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.8

Remove the statement "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." from its current position within the Agricultural Use Box and place it above the Agricultural Use Box.

The glove requirement in the Agricultural Use Requirements box on your proposed labeling is missing or incorrect. Remove the incorrect requirement (if any) and add "Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinyl chloride or viton." The exact location is shown in Sections F and G on Part 2 of the Product Worksheet in Supplement Three-A to PR Notice 93-7.

You must retain from your original label any statements

IMPERIAL INC

EPA Reg. Number: 407-383 IMPERIAL SEVIN SUSPENSION Application date: 08/19/93

Original Submission

about entry restrictions that apply to the non-agricultural uses on your product. Create a Non-Agricultural Use Requirements box in the Directions For Use section of your labeling and add the statements: "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." Then add to the box the statements that are in brackets [] on your original label. Please refer to the instructions for creating a Non-Agricultural Use Requirements box starting on page 45 of Supplement Three to PR Notice 93-7 (Main Labeling Guidance).

Correct the typographical errors circled on your proposed label.

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IMPERIAL SEVIN R

brand carbaryl insecticide SUSPENSION

N-Methyl Carbamate

ACTIVE INGREDIENT:	
Carbaryl (1-naphthyl N methylcarbamate)	24%
INERT INGREDIENTS:	
Total	

Contains 2 lbs. carbaryl per gallon.

R SEVIN is a registered trademark of Rhone-Poulenc for carbaryl insecticide.

KEEP OUT OF REACH OF CHILDREN CAUTION

SEE SIDE PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 407-383 EPA Est. 407-IA-1 D - 75

Manufactured by IMPERIAL INC.
Shenandoah, IA 51601

NET CONTENTS

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

May be harmful if swallowed. Avoid breathing spray mist. Avoid contact with eyes, skin or clothing.

Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on a EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long sleeved shirt and long pants.
- Chemical-resistant gloves, such as butyl rubber or nitrile rubber or neoprene or polyvinyl chloride (PVC).
- Shoes plus socks.

Follow manufacturers instructions for cleaning or maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ACCEPTED
with COMMENTS
ln EPA Letter Dated

MAR 18 1994.
Under the Federal Insecticide.
Fundicide, and Redemicide Act
as amended, for the penticide
registered under EPA Reg. No.
4407-383

USER SAFETY RECOMMENDATIONS

Users should:

- Users should:
 Wash hands before eating chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic and estuarine invertebrates. For terrestral uses, do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water Do not contaminate water by cleaning of equipment or disposal of mark. waste.

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 apply where runoff is likely to occur. Apply this product only as specified on this label.

DIRECTIONS FOR USE

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

For any requirements specific to your State 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 , 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and 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 personel protective equipment (PPE), and restrictedentry interval. The requirements in this box apply only to uses of this product that are covered by the Worker Protection Standard.

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.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that envolves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls.
- Chemical-resistant gloves, such as butyl rubber or nitrile rubber neoprene or polyvinyl chloride (PVC).
- Shoes plus socks.

STORAGE AND DISPOSAL

STORAGE: Store in original container, in a cool, dry, secure area away from fertilizer, food, or feed. Keep container closed.

PRODUCT DISPOSAL: Securely wrap original container in several layers of newspaper and discard in trash.

CONTAINER DISPOSAL: Do not reuse empty container. Wrap container and put in trash.

SHAKE BEFORE USING

This suspension of SEVIN brand carbaryl insecticide is designed to be mixed with water and can be applied with all types of sprayers. Prepare only as much spray solution as needed for each application. Do not store spray solution.

APPLES

To control apple aphid, codling moth, apple rust mite, bagworm, European apple sawfly, eye-spotted bud moth, Forbes scale, fruittree leafroller, green fruitworm, Japanese beetle, lecanium scales, oyster shell scales, pear leaf blister mite, pear rust mite, periodical cicada, plum curculio, leafroller, rosy apple aphid, San Jose scale, tarnished plant red-banded bug, tentiform leafminer, wooly apple aphid, apply at the rate of 1 tbsp. (1/2 fluid ounce) per gallon of water or 1 pint per 25 gallons of water. For apple maggot, plum curculio, codling moth, and Oriental fruit moth, apply at petal fall and every 10 - 14 days thereafter until control is other pests, apply for full coverage in normal spray achieved. For Refer to your state recommendations. CAUTION: application of carbaryl on apples within 30 days of full bloom may cause apple thinning. To avoid this thinning effect, use an alternative pesticide until 30 days after full bloom. For rosy apple aphid control, apply before leaves curl. Foliage injury may result from combination with sprays with summer oils. optimum scale control, apply when crawlers are present. Do not apply within one day of harvest.

APRICOTS

To control catfacing insects, codling moth, cucumber beetles, European earwig, fruit tree leafroller, Japanese beetle, June beetle, lecanium scales, olive scale, orange tortrix, oriental fruit moth, pandemis moth, peach twig borer, periodical cicada, Platynota flavendana, plum curculio, red-banded leafroller, San Jose scale, tarnished plant bug, tussock moths, lesser peach tree borer, apply at the rate of 1 tbsp. (1/2 fluid ounce) per gallon of water or 1 pint per 25 gallons of water. For codling moth, Oriental fruit moth and plum curculio, apply at petal fall and every 10 - 14 days thereafter until control is achieved. For optimum scale control, apply when crawlers are present. For lesser peach tree borer, make applications during appearance of moths 'n early to late summer. Apply two to three sprays to trunk from ground to scaffold limbs timed with moth flight. Do not apply within three days of harvest.

CHERRIES

To control codling moth, eastern tent caterpillar, orange tortrix, tussock moths, black cherry aphid, soft brown scale, cherry fruit fly, cherry fruitworm, eye-spotted bud moth, Forbes scale, fruittree leafroller, Japanese beetle, lecanium scales, mealy plum aphid, oyster shell scale, peach twig borer, plum curculio, prune leafhopper, red-banded leafroller, San Jose scale, lesser peach tree borer, apply at the rate of 1 tbsp. (1/2 fluid ounce) per gallon of water or 1 pint per 25 gallons of water. For codling moth, apply at petal fall and every 10 - 14 days thereafter until control is achieved. For lesser peach tree borer, make applications during appearance of moths in early to late summer. Apply two to three sprays to trunk from ground to scaffold limbs timed with moth flight. For optimum scale control, apply when crawlers are present. For plum curculio, apply at petal fall and every 10 - 14 days thereafter until control is achieved. Do not apply within one day of harvest.

NECTARINES

codling moth, cucumber beetles, European To control catfacing insects, earwig, pandemis moth, fruittree leafroller, Japanese beetle, June beetles, lecanium scales, olive scale, orange tortrix, Oriental fruit moth, peach periodical cicada, Platynota flavendana, plum curculio, redborer. Jose scale, tarnished plant bug, tussock moths, leafroller, San banded lesser peach tree borer, apply at the rate of 1 tbsp. (1/2 fluid ounce) per gallon of water or 1 pint per 25 gallons of water. For codling moth, Oriental fruit moth, and plum curculio, apply at petal fall and every 10 -14 days thereafter until control is achieved. For optimum scale control, apply when crawlers are present. For lesser peach tree borer, make applications during appearance of moths in early to late summer. Apply two to three sprays to trunk from ground to scaffold limbs, timed with moth Do not apply within three days of harvest. flight.

PEACHES

To control catfacing insects, codling moth, cucumber beetles, European earwig, fruittree leafroller, Japanese beetle, June beetles, lecanium scale, olive scale, orange tortrix, Oriental fruit moth, pandemis moth, peach twig borer, periodical cicada, Platynota flavendana, plum curculio, red-banded leafroller, San Jose scale, tarnished plant bug, tussock moths, lesser peach tree borer, apply at the rate of 1 tbsp. (1/2 fluid ounce) per gallon of water or 1 pint per 25 gallons of water. For codling moth, Oriental fruit moth and plum curculio, apply at petal fall and every 10 - 14 days thereafter until control is achieved. For optimum scale control, apply when crawlers are present. For lesser peach tree borer, make applications during appearance of moths in early to late summer. Apply two to three sprays to trunk from ground to scaffold limbs timed with moth flight. Do not apply within one day of harvest.

PEARS

bagworm, California pear-slug, codling moth, eye-spotted bud To control green apple aphid, green fruitworms, lecanium scales, lygus bugs, orange tortrix, oyster shell scale, pear leaf blister mite, pear psylla, pear rust mite, San Jose scale, wooly apple aphid, apply at the rate of 1 tbsp. (1/2 fluid ounce) per gallon of water or 1 pint per 25 gallons of water. Heavy aphid populations may require repeated applications. codling moth, apply at petal fall and every 10 - 14 days thereafter until For pear psylla, apply when eggs hatch or young is achieved. For optimum scale control, apply when crawlers are nymphs are present. Foliar injury may occur from combination with summer oils. present. not apply within one day of harvest.

PLUMS

To black cherry aphid, brown soft scale, cherry fruit fly, cherry control fruitworm, eye-spotted bud moth, Forbes scale, fruittree leafroller, Japanese beetle, lecanium scale, mealy plum aphid, oyster shell scale, peach twig borer, plum curculio, prune leafhopper, red-banded leafroller, San Jose scale, lesser peach tree borer, apply at the rate of 1 tbsp. (1/2 ounce) per gallon of water or 1 pint per 25 gallons of water. codling moth, eastern tent caterpillar, orange tortrix, tussock moths, use 3/4 tbsp. (1/3 fluid ounce) in one gallon or 3/4 pint in 25 gallons of For codling moth and plum curculio, apply at petal fall and every water. days thereafter until control is achieved. For optimum scale control, apply when crawlers are present. For lesser peach tree borer make applications during appearance of the moths in early to late summer. two to three sprays to trunk from ground to scaffold limbs timed with moth flight. Do not apply within one day of harvest.

ASPARAGUS

To control asparagus beetles, apply at the rate of 2 tbsp. (1 fluid ounce) per gallon of water or 1 quart per 25 gallons of water. Apply to seedlings or spears. Do not repeat application within three days. Do not apply within one day of harvest.

BEANS

To control bean leaf beetle, bean leafroller, cucumber beetles, flea beetles, Japanese beetles, leafhoppers, velvet bean caterpillar, western bean cutworm, armyworms, corn earworm, cutworms, stinkbugs, tarnished plant bugs, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For Mexican bean beetle, use 1 quart per acre or 3/4 ounce per 100 square feet.

BEETS

To control armyworms, cabbage looper, stinkbugs, tarnished plant bug, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For flea beetle, harlequin bug and leafhopper, use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet.

BROCCOLI, BRUSSELS SPROUTS, CAULIFLOWER, KOHLRABI AND CABBAGE
To control armyworms, cabbage looper, corn earworms, diamondback moth, imported cabbageworm, stinkbugs, tarnished plant bug, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For flea beetle and harlequin bug, use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet. Where cabbage looper is the principle problem, use an alternative pesticide approved for it. For control of small cabbage loopers after edible parts start to form, apply at 5 - 7 day intervals. Do not apply within three days of harvest.

COLLARDS, KALE AND MUSTARD GREENS

To control armyworms, cabbage loopers, corn earworms, diamondback moth, imported cabbageworm, stinkbugs, tarnished plant bug, apply at the rate of l gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For flea beetles and harlequin bug, use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet. Where cabbage looper is the principle problem, use an alternative pesticide recommended for it. For control of small cabbage loopers after edible parts start to form, apply at 5 - 7 day intervals. Do not apply within 14 days of harvest.

CORN

To control corn earworm, corn rootworm adults, European corn borer, fall armyworm, flea beetles, Japanese beetle, leafhoppers, sap beetles, cutworms, apply at the rate of 1 gallon per acre or 3 oz. per 100 sq. ft. in sufficient water for thorough coverage. For larvae in the whorl (budworm damage) and foliage feeders, apply to entire plant. Repeat as necessary. For insects attacking silks and ears, apply at 2 - 3 day intervals starting when silks first appear and continuing until silks begin to dry. Three or more applications may be required depending on the severity of infestation. Timing and good coverage are absolutely essential for effective control. For cutworms, apply in at least 15 gallons of water. Spray in a 12" band over the corn row.

CUCUMBERS

To control cucumber beetles, flea beetles, leafhoppers, squash bugs, apply at the rate of 1/2 gallon per acre or 1 1/2 ounces per 100 square feet in sufficient water for thorough coverage. For melonworm and pickleworm, use 1 quart per acre or 3/4 ounce per 100 square feet. To avoid possible injury to tender foliage, do not apply when foliage is wet or when rain or excessive humidity is expected during the next two days.

EGGPLANT

To control European corn borer, fall armyworm, lacebugs, pinworms, stinkbugs, tomato fruitworm, tomato hornworm, tarnished plant bug, cutworms, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For Colorado potato beetle, flea beetles and leafhoppers, use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet.

ENDIVE AND LETTUCE

To control armyworms, cabbage looper, corn earworm, imported cabbageworm, stinkbugs, tarnished plant bugs, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For flea beetle, harlequin bug, and leafhoppers, use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet. Where cabbage looper is the principle problem, use an alternative pesticide recommended for it. For control of small cabbage loopers after edible parts start to form, apply at 5 - 7 day intervals. Do not apply to endive and leaf lettuce within 14 days of harvest. Do not apply to head lettuce within 3 days of harvest. To avoid possible injury to lettuce do not apply when foliage is wet or when excessive humidity or rain is expected during the next two days.

GRAPES

To control European fruit lecanium, grape leaf folder, grape leafhopper. grape leaf skeletonizer, grape berry moth, Japanese beetle, June beetle. red-banded leafroller, apply at the rate of 3 quarts in 200 gallons of water. For grape leaf folder, apply just before first brood larvae emerge from rolls.

MELONS

To control cucumber beetles, flea beetles, leafhoppers, squash bugs, apply at the rate of 1/2 gallon per acre or 1 1/2 ounces per 100 square feet in sufficient water for thorough coverage. For melonworm and pickleworm, use 1 quart per acre or 3/4 ounce per 100 square feet. To avoid possible injury to tender foliage, do not apply when foliage is wet or when rain or excessive humidity is expected within the next two days. Carbaryl injures watermelons in Florida.

PEANUTS

To control blister beetle, grasshoppers, alfalfa caterpillar, bean leaf beetles, cucumber beetles, green cloverworm, Japanese beetle, leafhoppers (including potato leafhopper), three-cornered alfalfa hopper, thrips, velvet bean caterpillar, apply at the rate of 1/2 gallon per acre or 1 1/2 ounces per 100 square feet in sufficient water for thorough coverage. To avoid possible injury to tender foliage, do not apply when foliage is wet or when rain or excessive humidity is expected during the next two days.

PEAS

To control armyworms, grasshoppers, apply at the rate of 3 quarts per acre or 2 ounces per 100 square feet in sufficient water for thorough coverage. For alfalfa looper, Colorado potato beetles, and leafhoppers use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet.

PEPPERS

To control European corn borer, fall armyworm, stinkbugs, tomato fruitworm, tomato hornworm, tarnished plant bug, climbing cutworms, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For Colorado potato beetle, flea beetle, and leafhoppers use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet.

POTATOES

To control European corn borer, fall armyworm, lacebugs, lygus bugs. stinkbugs, tomato fruitworm, tomato hornworm, tarnished plant bug, cutworms, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water to thoroughly cover. For Colorado potato beetle, flea beetle and leafhopper use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet.

RADISHES

To control flea beetles, harlequin bugs, armyworms, cabbage loopers, corn earworm, diamondback moths, imported cabbageworms, stinkhugs, tarnished plant bugs, apply at the rate of l gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. Where cabbage looper is the principle problem, use an alternative pesticide approved for it. For control of small cabbage loopers after edible parts start to form, apply at 5 - 7 day intervals. Do not apply within three days of harvest.

RUTABAGA AND TURNIPS

To control armyworms, cabbage loopers, corn earworms, diamondback moths, imported cabbageworms, stinkbugs, tarnished plant bugs, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For flea beetles and harlequin bugs, use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet. Where cabbage looper is the principle problem, use an alternative pesticide recommended for it. For control of small cabbage loopers after edible parts start to form, apply at 5 - 7 day intervals. Do not apply within 3 days of harvest. Do not apply within 14 days of harvest if tops are to be used for food or feed.

SPINACH

To control armyworms, cabbage loopers, stinkbugs, tarnished plant bugs. apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For flea beetle and leafhoppers, use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet. Where cabbage looper is the principle problem, use an alternative pesticide recommended for it. For control of small cabbage loopers after edible parts start to form, apply at 5 - 7 day intervals. Do not apply within 14 days of harvest.

SQUASH

To control cucumber beetles, flea beetles, leafhoppers, squash bugs, apply at the rate of 1/2 gallon per acre or 1 1/2 ounces per 100 square feet in sufficient water for thorough coverage. For pickleworm and melonworm, use 1 quart per acre or 3/4 ounce per 100 square feet. To avoid possible injury to tender foliage, do not apply when foliage is wet or when rain or excessive humidity is expected during the next two days.

STRAWBERRIES

To control meadow spittlebug, omnivorous leaftier, strawberry leafroller, strawberry weevil, apply at the rate of l-2 tbsp. (1/2-1 fluid ounce) per gallon of water or l pint to l quart per 25 gallons of water. Do not apply within one day of harvest.

TOMATOES

To control European corn borer, fall armyworm, lacebugs, pinworms, stinkbugs, tomato fruitworms, tomato hornworms, tarnished plant bugs, cutworms, apply at the rate of 1 gallon per acre or 3 ounces per 100 square feet in sufficient water for thorough coverage. For Colorado potato beetle, flea beetle and leafhoppers use 1/2 gallon per acre or 1 1/2 ounces per 100 square feet.

BLACKBERRIES, BOYSENBERRIES, RASPBERRIES

To control Japanese beetle, leafhoppers, leafrollers, raspberry aphids, apply at the rate of 1 gallon in 100 to 200 gallons of water per acre or 3 ounces in 2 1/2 to 5 gallons of water. Do not apply within 7 days of harvest.

LAWNS AND TURF

To control ants, chinch bugs, crickets, cutworms, earwigs, fall armyworms, fleas, leafhoppers, millipedes, mosquitoes, sod webworms, ticks apply at the rate of 4 to 5 pints in 150 to 200 gallons of water per 5000 square feet (1 pint in 40 gallons per 1000 square feet). For best results mow lawn, remove clippings and apply immediately after rain or watering. Apply full volume to insure good penetration. Do not water for at least two days after application. Repeat in two to three weeks if needed.

ANNUAL AND HERBACEOUS PLANTS

To control blister beetles, flea beetles, Japanese beetles, lacebugs, leafhoppers, leafrollers, plant bugs, psyllids, rose aphids, thrips (exposed). June beetles, mealy bugs, and thornbugs apply at the rate of l tbsp. (1/2 fluid ounce) per gallon of water or l pint per 25 gallons of water. Carbaryl injures Boston ivy and Virginia creeper. Injury to tender foliage may occur if plants are wet when treated or in the presence of high humidity.

SHRUBS, TREES AND WOODY PLANTS

To control apple aphid, bagworm, birch leafminer, boxelder bug, boxwood leafminer, elm leaf aphid, elm leaf beetle, gypsy moth, Japanese beetle, lacebugs, leafhoppers, leafrollers, oak leafminers, orange tortrix, periodical cicada, rose aphid, rose slug, scales, thrips (exposed), tent caterpillars, willow leaf beetles, June beetles, mealy bugs, mimosa webworm, puss caterpillars, thornbugs, apply at the rate of 1 tbsp. (1/2 fluid ounce) per gallon of water or 1 pint per 25 gallons of water.

BORDERS, DITCH BANKS, RANGELAND, AND WASTELAND

To control grasshoppers, apply at the rate of 3 quarts per acre or 2 ounces per 100 square feet in sufficient water for thorough coverage. Use at this rate for controlling nymphs and on sparse vegetation. Repeat as needed.