

264-335

05-05-2004

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

May 5, 2004

Ms. Danielle A. Larochelle
Bayer Crop Science
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Dear Ms. Larochelle:

Subject: Labeling for SEVIN® brand RP4 Carbaryl Insecticide
EPA Registration No. 264-335
Your Submission Dated November 26, 2002

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided you make the following change before you release the product for shipment bearing the amended labeling:

1. In the **Precautionary Statements** section under **Personal Protective Equipment**: Change "waterproof gloves" to "chemical-resistant gloves". This change is also required under the **Directions for Use** section in the **Agricultural Use Requirements** box.

Submit two copies of your final printed labeling before you release the product for shipment. A stamped copy is enclosed for your records. If you have any questions, please contact Ann Hanger at (703) 306-0395 or hanger.ann@epa.gov.

Regards,

A handwritten signature in black ink, appearing to read "John Hebert".

John Hebert
Product Manager 7
Insecticide/Rodenticide Branch
Registration Division (7505C)

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SEVIN[®] brand RP4 Carbaryl Insecticide

ACTIVE INGREDIENT:

Carbaryl (1-naphthyl N-methylcarbamate) 43.0% by wt.

INERT INGREDIENTS:

..... 57.0% by wt.

(Contains 4 Pounds Carbaryl Per Gallon)

EPA Reg. No. 264-335

EPA Est. No. 264-MO-02

KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

IF SWALLOWED:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • Do not give anything by mouth to an unconscious person. 	
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice. 	ACCEPTED with COMMENTS In EPA Letter Dated:
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice. 	MAY 5 2004 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 264-335
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice. 	

For **MEDICAL** Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

NOTE TO PHYSICIAN: Carbaryl contains an N-methyl carbamate that inhibits cholinesterase. Drugs like 2-Pam (pyridine-2-aldoxime methiodide) are not recommended. To aid in the confirmation of diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analysis will be arranged by Bayer CropScience. Consultation on therapy can be obtained at all hours by calling the appropriate emergency number 1-800-334-7577 (U.S.A.)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS (& DOMESTIC ANIMALS)

CAUTION

HARMFUL IF SWALLOWED, ABSORBED THROUGH THE SKIN, INHALED, OR IF IN EYES.

Avoid breathing vapors or spray mist. Avoid contact with eyes, skin or clothing. Keep out of reach of children and domestic animals.

OVEREXPOSURE MAY CAUSE: Salivation, watery eyes, pinpoint eye pupils, blurred vision, muscle tremors, difficult breathing, excessive sweating, abdominal cramps, nausea, vomiting, diarrhea, weakness, headache. **IN SEVERE CASES CONVULSION, UNCONSCIOUSNESS AND RESPIRATORY FAILURE MAY OCCUR. SIGNS AND SYMPTOMS OCCUR RAPIDLY FOLLOWING OVEREXPOSURE TO THIS PRODUCT.**

PERSONAL PROTECTIVE EQUIPMENT:

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and chemical-resistant headgear for overhead exposure.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to aquatic and estuarine invertebrates. For terrestrial uses, 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 area treated. Do not contaminate water by cleaning 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. Contact your Cooperative Agricultural Extension Service or your local Bayer CropScience representative for further information.

DIRECTIONS FOR USE

**It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Read the entire label before using this product.**

Strictly observe label directions and cautions. Do not use on any crop not listed on this label or supplemental labeling as any residues remaining may be illegal or harmful. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. The area being treated must be vacated by unprotected persons. Keep unprotected persons out of treated areas until sprays have dried. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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 leaf surfaces, stems and branches.

Do not repeat applications more than once a week.

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 personal protective equipment (PPE) and restricted-entry interval. 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 (REI) 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 as plants, soil, or water, is: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks, and chemical-resistant headgear for overhead exposure.

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.

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USER SAFETY REQUIREMENTS

Wear long-sleeved shirt, 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.

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 the toilet.

Do not allow children or pets to contact treated area until sprays have dried.

STORAGE AND DISPOSAL

STORAGE

Store unused product in original container only, in cool, dry area out of reach of children and animals. Do not store in areas where temperatures frequently exceed 100°F. This product may be used following exposure to several freeze-thaw cycles.

If container is damaged, before cleaning up, put on Personal Protective Equipment.

PESTICIDE DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. 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 container for recycling or reconditioning or puncture and dispose of container in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If container is burned, stay out of smoke.

GENERAL CAUTIONS AND RESTRICTIONS

SEVIN® brand RFP Carbaryl Insecticide is a suspension of microfine SEVIN® brand carbaryl insecticide in an aqueous medium. It readily disperses in water to form a spray which may be applied with a variety of mechanical or hand-operated application equipment.

PREHARVEST AND GRAZING RESTRICTIONS AND LIMITATIONS

Tolerances established under the Federal Food, Drug and Cosmetic Act permit the sale of labeled crops bearing probable carbaryl residues when this product is used in accordance with the label directions. If used as directed, treated forage may be grazed or used as feed for dairy and meat animals without causing illegal residues in meat or milk. Do not apply at greater rates or at more frequent intervals than stated on the label. To do so may result in illegal residues in crops, meat, and milk.

Do not use reclaimed irrigation water from crops treated with carbaryl on crops for which carbaryl tolerances are not established.

Do not plant rotational food and feed crops not listed on this or other carbaryl labels in carbaryl treated soil.

PLANT RESPONSE PRECAUTIONS

Application to wet foliage or during periods of high humidity may cause injury to tender foliage.

Do not use on Boston ivy, Virginia creeper and maidenhair fern as injury may result. Carbaryl may also injure Virginia and sand pines.

The use of adjuvants may increase the potential for crop injury to sensitive crops.

Carefully observe label instructions for apple thinning to avoid excessive thinning. Combinations with certain herbicides on rice and soybeans may be phytotoxic. Refer to specific directions for appropriate crop.

APPLICATION STATEMENTS

Calibrate and adjust application equipment to insure proper rate and accurate placement. To clean spray system after use, drain and flush with a water and detergent mixture. Rinse thoroughly with clean water. Refer to the Storage and Disposal section for disposal instructions.

NOTE: Staining may occur on certain surfaces such as stucco, brick, cinder block, wood, fabrics, and carpet. Spray deposits on painted or stained surfaces or finishes (i.e., cars, houses, trailers, boats, etc.) should be immediately removed by washing to prevent discoloration. Avoid applications to surfaces where visible spray residues are objectionable. Staining of fabrics and carpet may be permanent.

RESISTANT SPECIES NOTICE

All references to armyworm on the crops listed below refer to the species, *Pseudaletia unipuncta*, often called the "true armyworm". Except where indicated otherwise, this product is not registered for the control of other armyworm species. Regional differences have been noted in the susceptibility of certain strains of fall armyworm, diamondback moth, Colorado potato beetle, Southern green stink bug, spotted tentiform leafminer, and tobacco budworm (on cotton) to carbaryl. If local experience indicates inadequate control, use an alternative pesticide.

MIXING, LOADING AND HANDLING INSTRUCTIONS

TO ASSURE A UNIFORM SUSPENSION, AGITATE, STIR OR RECIRCULATE ALL CONTAINERS OF THIS PRODUCT PRIOR TO USE. Remove oil, rust, scale, pesticide residues and other foreign matter from mix tanks and entire spray system. Flush with clean

water. Fill spray or mix tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of SEVIN® brand RP4 Carbaryl Insecticide, and then the remaining volume of water. Include rinse water from container. Prepare only as much spray mixture as can be applied on the day of mixing. MAINTAIN CONTINUOUS AGITATION DURING MIXING AND APPLICATION TO ASSURE A UNIFORM SUSPENSION. DO NOT STORE SPRAY MIXTURE FOR PROLONGED PERIODS OR DEGRADATION OF CARBARYL MAY OCCUR. Local water conditions may also accelerate the degradation of spray mixtures containing carbaryl. See COMPATIBILITY STATEMENT below.

COMPATIBILITY INFORMATION

SEVIN® brand RP4 Carbaryl Insecticide, when diluted with at least 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 with another product and the resulting crop response is unknown, the mixture should be tested on a small scale. Curdling, precipitation, greasing, layer formation or increased viscosity are symptoms of incompatibility. Incompatibility will reduce insect control and may cause application and handling difficulties or plant injury. Observe all cautions and limitations on labeling of all products used in mixtures. WHEN PREPARING COMBINATION SPRAYS, FIRST ADD SEVIN® BRAND RP4 CARBARYL INSECTICIDE TO AT LEAST AN EQUAL VOLUME OF WATER, MIX THOROUGHLY, AND THEN ADD COMBINATION PRODUCTS TO THE MIXTURE. DO NOT APPLY TANK MIX COMBINATIONS UNLESS YOUR PREVIOUS EXPERIENCE INDICATES THE MIXTURE IS EFFECTIVE AND WILL NOT RESULT IN APPLICATION PROBLEMS OR PLANT INJURY.

Carbaryl is unstable under highly alkaline conditions and mixtures with strong bases, such as Bordeaux, lime-sulfur and casein-lime spreaders, will result in chemical degradation of the insecticide. Do not use this product in water with pH values above 8.0 unless a buffer is added. If necessary, water should be buffered to neutral (pH = 7.0) before adding this product to the spray tank. Overhead irrigation with alkaline or muddy water after application will also accelerate chemical degradation and may result in reduced insect control.

APPLICATION PROCEDURES AND PRECAUTIONS

On all crops use sufficient gallonage to obtain thorough and uniform coverage. Observe crop label instructions for specific directions regarding spray volume where they occur. Calibrate spray equipment to deliver the required volume. If you should have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

NOTE: When treatment with SEVIN® brand RP4 has been completed, further irrigation over the treated area should be avoided for 24 to 48 hours to prevent washing the chemical off the crop.

SPRINKLER IRRIGATION SYSTEMS

Apply this product only through sprinkler irrigation systems including center pivot and solid set. Do not apply this product through any other type of irrigation system.

GENERAL PRECAUTIONS FOR APPLICATIONS THROUGH SPRINKLER IRRIGATION SYSTEMS

Maintain continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute solution per unit time.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shutdown. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment.

Do not apply when wind speed favors drift, when system connection or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled and drained.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop may result from nonuniform distribution of treated water.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water. A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water supplies are in place.

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SPECIFIC USE DIRECTIONS FOR HOME AND GARDEN

CROP/SITE GROUPINGS:

- Asparagus
- Brassica Leafy Vegetable Crops
- Cereal Grain Crops (Sweet Corn)
- Cucurbit Vegetables
- Fruiting Vegetables
- Leafy Vegetables
- Legume Vegetables
- Peanuts
- Root and Tuber Crops (Root and Tuber Crops except Sugar Beets and Sweet Potatoes; **Sweet Potatoes**)
- Small Fruits and Berries
- Tree Fruit Crops (Citrus Fruits; Olives; Pome Fruits; Stone Fruits)
- Tree Nut Crops (Pistachios; Tree Nuts)
- Trees and Ornamentals
- Turfgrass
- Control of Specific Pests Across Multiple Sites
 - Grasshoppers
 - Ticks which Vector Lyme Disease
 - Imported Fire Ants
 - Adult Mosquito Control

Nuisance Pest Control Around Building Perimeters

Directions for Use with a Hose-End Applicator

- Vegetables except Asparagus and Sweet Corn
- Asparagus
- Sweet Corn
- Small Fruits and Berries
- Turfgrass
- Trees and Ornamentals
- Control of Specific Pests across Multiple Sites
 - Ticks which Vector Lyme Disease
 - Imported Fire Ants
 - Adult Mosquito Control
- Nuisance Pest Control Around Building Perimeters

INSECT CONTROL

Begin application when insect populations reach recognized economic threshold levels. Consult the Cooperative Extension Service, Consultants, or other qualified authorities to determine appropriate threshold levels for treatment and specific use information in your area. Where a dosage range is indicated, use the lower rate on light to moderate infestations, young plants and early instars and use the higher rate on heavy infestations, mature plants, advanced instars and adults. Thorough and uniform spray coverage is essential for effective control.

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ASPARAGUS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Asparagus	Locust cicada Asparagus beetle Cutworms	3/4 to 1 1/2	Repeat applications as necessary up to a total of 3 times prior to harvest or a total of 5 times per crop but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
		1 1/2 to 3	Application to ferns or brush growth following harvest of spears: Repeat applications as necessary but not more often than every 7 days. Do not make more than a total of 5 applications per year to spears and ferns combined.

RESTRICTIONS AND PRECAUTIONS: ASPARAGUS

- Do not apply within 1 day of harvest.
- Do not apply more than a total of 4 1/2 fl.oz. per 1000 SQ.FT. before harvest of spears.
- Do not apply more than a total of 7 1/2 fl.oz. per 1000 SQ.FT. per year.

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BRASSICA LEAFY VEGETABLES CROPS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Broccoli Brussel Sprouts Cauliflower Cabbage Chinese	Fla beetles Harlequin bug Leafhoppers	3/8 to 3/4	Repeat applications as needed up to a total of 4 times but not more often than once every 7 days.
Cabbage Collards Kale Kohlrabi Mustard Greens	Amyworm Aster leafhopper Corn earworm Diamondback moth Fall armyworm Imported cabbageworm Lygus bugs Spittle bugs Stink bugs Tarnished plant bug	3/4 to 1 1/2	

RESTRICTIONS AND PRECAUTIONS: BRASSICA LEAFY VEGETABLES

- For Broccoli, Brussel Sprouts, Cabbage Cauliflower, and Kohlrabi, do not apply within 3 days of harvest.
- For Chinese Cabbage, Collards, Kale, and Mustard Greens, do not apply within 14 days of harvest.
- Do not apply more than a total of 4 1/2 fl.oz. per 1000 SQ.FT. per crop.

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CEREAL GRAIN CROPS

SWEET CORN

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Sweet Corn	Armyworm Chinch bugs Corn earworm Corn rootworm adults Fall armyworm Flea beetles	Japanese beetle Sap beetles Southwestern corn borer Leafhoppers	OBSERVE BEE CAUTION Repeat applications as necessary up to a total of 8 times but not more often than once every 7 days. Optimum timing and good coverage are essential for effective control
	European corn borer	1 1/8 to 1 1/2	For insects attacking silks and ears,
	Western bean cutworm	1 1/2	insecticide sprays should be applied starting when first silks appear and continuing until silks begin to dry. During silking, the minimum retreatment interval (7 days) may not provide adequate levels of protection under conditions of rapid growth or severe pest pressure. The use of an alternative product should be considered in conjunction with this product. For optimum chinch bug control, apply at least 20 gallons of total spray mixture per acre and direct spray toward stalk to provide thorough coverage. For optimum European corn borer control, do not apply less than 15 gallons of total spray mixture. For western bean cutworm, treat when infestation average 15% and at 90 to 100% tassel emergence. Treatment after 100% silk emergence will reduce effectiveness. For optimum cutworm control, apply in a 12-inch band, over the row, using sufficient volume of water to obtain thorough coverage. For broadcast application, use at least 20 gallons of total spray mixture per acre. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

RESTRICTIONS AND PRECAUTIONS: SWEET CORN

- Do not apply within 2 days of harvest of ears or within 14 days of harvest or grazing of forage.
- Do not apply more than a total of 12 fluid ounces per 1000 SQ.FT. per crop.

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CUCURBIT VEGETABLES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Cucurbit Vegetables: Cucumbers Melons Pumpkins Squash	Pickleworm Melonworm	3/8 to 3/4	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days For optimum control of squash bugs, apply sufficient spray volume for thorough coverage and time sprays for early morning or late afternoon.
	Cucumber beetles Flea beetles Leafhoppers Squash bugs	3/4	

RESTRICTIONS AND PRECAUTIONS: CUCURBIT VEGETABLES

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 4 1/2 fl.oz. per 1000 SQ.FT. per crop.
- Observe plant response precautions.

FRUITING VEGETABLES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Fruiting Vegetables: Tomatoes, Peppers, Eggplant	Colorado potato beetle European corn borer Fall armyworm Lace bugs Stink bugs (suppression) Tarnished plant bug Thrips (suppression) Tomato fruitworm	3/4 to 1 1/2	Repeat applications as necessary up to a total of 7 times but not more often than once every 7 days. Thorough coverage is essential to effectively suppress stink bugs. When disease transmission is suspected, monitor fields following application and retreat if reinfestation occurs but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Flea beetles Leafhoppers	3/8 to 3/4	
	Cutworms	1 1/2	

RESTRICTIONS AND PRECAUTIONS:

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 6 fl.oz. per 1000 SQ.FT. per crop.

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LEAFY VEGETABLES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Leafy vegetables: Celery, Dandelion,	Flea beetles Harlequin bug Leathoppers	3/8 to 3/4	Repeat applications as necessary up to a total of 5 times but not more often than every 7 days.
Endive, Lettuce (head and leaf), Parsley, Spinach, Swiss Chard	Armyworm Aster leafhopper Corn earworm Fall armyworm Imported cabbageworm Lygus bugs Spittlebugs Stink bugs Tarnished plant bug	3/4 to 1 1/2	

RESTRICTIONS AND PRECAUTIONS: LEAFY VEGETABLES

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 4 1/2 fl.oz. per 1000 SQ.FT. per crop.

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LEGUME VEGETABLES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Legume Vegetables: Fresh and Dried Beans <i>(Phaseolus</i> <i>species</i> including snap, navy and kidney), Fresh and Dried Peas <i>(Pisum</i> <i>species),</i> Lentils, Cowpeas, Southern Peas	Bean leaf beetle Green cloverworm Blister beetle Japanese beetle Cucumber beetles Mexican bean beetle Grape colaspis Velvetbean caterpillar	3/8 to 3/4	Repeat applications as necessary up to a total of 4 times but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant. For cutworm control, this product is most effective against species which feed on the upper portions of the plant. Use lower rates for light to moderate populations and smaller instars and to provide maximum survival of beneficial insects and spiders. Use the higher rates for heavy populations and larger instars.
	Corn earworm	3/8 to 1 1/8	
	Alfalfa caterpillar Three cornered Colorado potato alfalfa hopper beetle Thrips Flea beetles Western bean Leafhoppers cutworm	3/4	
	Armyworm Stink bugs Cutworms Tarnished plant bug European corn borer Webworms Fall armyworm	3/4 to 1 1/8	
	DO NOT USE ON LENTILS IN CALIFORNIA Alfalfa looper Pea weevil (suppression) Saltmarsh caterpillar Cowpea curculio Woollybean (suppression) caterpillar Painted lady (Thistle Yellowstriped caterpillar) armyworm Pea leaf weevil	1 1/8	
California only: Corn earworm Lygus bugs (suppression) (suppression) Limabean podborer Stink bugs (suppression) (suppression)	1 1/8		

RESTRICTIONS AND PRECAUTIONS: LEGUME VEGETABLES

- Do not apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed, or hay.
- Do not apply more than a total of 4 1/2 fl.oz. per 1000 SQ.FT. per crop.
- Do not apply a combination of this product and 2,4-DB herbicides to soybeans as crop injury may result.
- Observe plant response precautions.

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PEANUTS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Peanuts	Flea beetles Mexican bean beetle	3/8 to 3/4	Repeat applications as necessary up to a total of 5 times but not more often than once every 7 days.
	Alfalfa caterpillar Bean leaf beetle Cucumber beetle Green cloverworm Japanese beetle Leafhoppers	3/4	
	Armyworm Corn earworm Fall armyworm	3/4 to 1 1/8	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Rednecked peanutworm Three cornered alfalfa hopper Thrips Velvetbean caterpillar Stink bugs Webworms Cutworms	1 1/2	

RESTRICTIONS AND PRECAUTIONS: PEANUTS

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 6 fluid ounces per 1000 SQ.FT. per crop.
- Observe plant response precautions.

ROOT AND TUBER CROPS

ROOT AND TUBER CROPS EXCEPT SUGAR BEETS AND SWEET POTATOES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Root and Tuber Crops: Garden Beets, Carrots, Horseradish, Parsnips, Radishes, Rutabagas, Salsify, Potatoes	Flea beetles Leafhoppers	3/8 to 3/4	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days.
	Armyworm Aster leafhopper Colorado potato beetle Corn earworm Cutworms European corn borer Fall armyworm	Lace bugs Lygus bugs Spittlebugs Stink bugs Tarnished plant bug	

RESTRICTIONS AND PRECAUTIONS: ROOT AND TUBER CROPS EXCEPT SUGAR BEETS AND SWEET POTATOES

- Do not apply within 7 days of harvest.
- Do not apply more than a total of 4 1/2 fluid ounces per 1000 SQ.FT. per crop.

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SWEET POTATOES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS	
Sweet Potatoes	Corn earworm Cucumber beetles Flea beetles Sweet potato hornworm	Sweet potato weevil Tortoise beetles Whitefringed beetle	3/4 to 1 1/2	Preplant dip for control of sweet potato weevil: Just prior to planting, dip sweet potato cuttings in a suspension containing 2 gallons of this product in 100 gallons of water (2.6 fluid ounces per gallon of water)
	Yellowstriped armyworm			

RESTRICTIONS AND PRECAUTIONS: SWEET POTATOES

- Do not apply within 7 days of harvest.
- Do not apply more than a total of 6 fluid ounces per 1000 SQ.FT. per crop with in-season sprays.
- Do not apply more than a total of 9/10 fluid ounces per 1000 SQ.FT. as a preplant dip treatment.

SMALL FRUITS AND BERRIES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS			
Small Fruits and Berries: Caneberries, Blueberries, Cranberries, Grapes, Strawberries	European fruit lecanium European raspberry aphid Flea beetles Grape leaf folder Grape leafroller Grape leafroller Japanese beetle Leafhoppers Leafrollers Meadow spittlebug Omnivorous leaf tier	Rose chafer Snowy tree cricket Strawberry bud weevil Strawberry clipper Strawberry fruitworm Strawberry leafroller Strawberry weevil Western grapeleaf skeletonizer Western yellowstriped armyworm	3/4 to 1 1/2	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 5 times but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant. In grapes for grape leaf folder control, apply before first brood larvae emerge from rolls.		
	Blueberry maggot Cherry fruitworm Cranberry fireworm Cranberry fruitworms Cranberry twig girdler	Elm spanworm Gypsy moth Spaganothus worm Tarnished plant bug			1 1/8 to 1 1/2	In grapes, do not concentrate spray on the bunch or visible residues may result.
	Eight-spotted forester Cutworms Grape berry moth June beetles Omnivorous leafroller	Orange tortrix Raspberry fruitworm Raspberry sawfly Redbanded leafroller Saltmarsh caterpillar			1 1/2	

RESTRICTIONS AND PRECAUTIONS: SMALL FRUITS AND BERRIES

- Do not apply within 7 days of harvest.
- Do not apply more than a total of 7 1/2 fl.oz. per 1000 SQ.FT. per crop.
- CAUTION: Use in cranberries may kill shrimp and crabs. Do not use in areas where these are important resources.
- Carbaryl may injure Early Dawn and Sunrise varieties of strawberries.

TREE FRUIT CROPS

On all tree fruit crops, apply in sufficient volume for adequate coverage. This will vary depending on the pest and its severity, the tree condition, size, and density, and other factors.

CITRUS FRUITS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Citrus Fruits	Avocado leafroller California orangedog Citrus cutworm Fruittree leafroller	Orange Tortrix Western tussock moth	1 1/2 to 2 1/4 OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 8 times but not more often than once every 14 days.
	Citrus rust mite Eriophyid mites	Plant bugs Scale insects [such as Black scale, brown soft scale, California red scale (except in California), citrus snow scale, yellow scale (except in California)]	2 1/4 to 3 3/4 For scale control, apply when crawlers are present. For best control of Eriophyid mites including citrus rust mite, apply when pest populations are low.
	Apopka weevil (adult) Citrus root weevils (adults)	Fuller Rose Beetle Little leaf notcher (adult)	3 3/4 to 5 5/8
	California Only California red scale Yellow scale		3 3/4 to 12 Do not make more than 1 application per season for California red scale. Apply when crawlers are present.

RESTRICTIONS AND PRECAUTIONS: CITRUS FRUITS

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply within 5 days of harvest.
- Do not apply more than a total of 15 fluid ounces per 1000 SQ.FT. per crop.

OLIVES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Olives	Scale insects (such as olive scale, black scale)	3 3/4 to 5 5/8	Up to 2 applications per crop may be made but not more often than once every 14 days.

RESTRICTIONS AND PRECAUTIONS: OLIVES

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply within 14 days of harvest.
- Do not apply more than a total of 11 1/4 fluid ounces per 1000 SQ.FT. per crop.

16/02

POME FRUITS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Pome Fruits: Apples, Pears, Loquats, Crabapples, Oriental Pears	White apple leafhopper	3/8 to 1 1/8	OBSERVE BEE CAUTION
	Apple aphid Codling moth	3/4 to 2 1/4	On apples, avoid use during the period from full bloom until 30 days after full bloom unless fruit thinning is desired. Use for pest control during this period also may result in fruit removal.
	Apple aphid Pearleaf blister mite Apple maggot Pear psylla Apple mealybug Pear rust mite Apple rust mite Periodical cicada Bagworms Plum curculio California pearslug Redbanded leafroller (pear sawfly) Rosy apply aphid European apple sawfly Scale insects (Forbes scale, Eyespotted bud moth Lecanium scale, Fruittree leafroller San Jose scale) Gypsy moth Tarnished plant bug Japanese beetle Tentiform leafminers Lesser appleworm Woolly apple aphid Lygus bugs Yellowheaded Orange tortrix fireworm	1 1/8 to 2 1/4	Repeat applications as necessary up to a total of 8 times per crop (including thinning sprays on apples) but not more often than once every 14 days. For psylla control, apply when eggs hatch or young nymphs are present. For scale control, apply when crawlers are present.
Apples Only, for Fruit Thinning		3/4 to 2 1/4	OBSERVE BEE CAUTION For easily thinned varieties: apply 1/5 to 1/3 fl. oz. per 1000 SQ. FT. For difficult to thin varieties: apply 1/3 to 2/3 fl. oz. per 1000 SQ. FT. Apply between 10 and 25 days after full bloom. 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. Rates may vary depending on variety and local orchard conditions. Consult with your County Extension Service or other experts for advice on the proper use of this product.

RESTRICTIONS AND PRECAUTIONS: POME FRUITS

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not use on pears between the tight flower cluster up to the 20 mm fruit size. Use during this period may result in undesirable fruit thinning and/or deformed fruit.
- Do not apply to Quince.
- Do not apply within 3 days of harvest.
- Do not apply more than a total of 11 1/4 fluid ounces per 1000 SQ. FT. per crop.
- Do not make more than a total of 8 applications per crop.

17/62

STONE FRUITS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Stone Fruits: Apricots, Cherries, Nectarines, Peaches, Plums, and Prunes	Apple pandemis Black cherry aphid Cherry fruitworm Cherry maggot (Cherry fruit fly) Codling moth Cucumber beetles Eastern tent caterpillar Eyespotted bud moth European earwig Fruittree leafroller Green fruitworm Gypsy moth Japanese beetle June beetle Lesser peachtree borer Mealy plum aphid Orange tortrix Oriental fruit moth Peach twig borer Periodical cicada Plum curculio Prune leafhopper Redbanded leafroller Rose chafer Scale insects (Brown soft scale, Forbes scale, Lecanium scale, Olive scale, Oystershell scale, San Jose scale) Tarnished plant bug Tussock moth Variegated leafroller	1 1/2 to 2 1/4	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 3 times per crop but not more often than once every 7 days. An additional application at the dormant or delayed dormant timing may be made. For optimum scale control, apply when crawlers are present. For lesser peachtree borer, best results have been found by thoroughly spraying limbs and tree trunks at weekly intervals during moth flight.
	<p style="text-align: center;">California Only:</p> Black cherry aphid Cherry fruitworm Cherry maggot (Cherry fruit fly) Codling moth Cucumber beetles Eyespotted bud moth European earwig Fruittree leafroller Green fruitworm Mealy plum aphid Orange tortrix Oriental fruit moth Peach twig borer Scale insects (Brown soft scale, Forbes scale, Lecanium scale, Olive scale, Oystershell scale, San Jose scale) Tarnished plant bug Tussock moth	2 1/4 to 3	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 3 times per crop but not more often than once every 14 days. An additional application at the dormant or delayed dormant timing may be made. For optimum scale control, apply when crawlers are present.
	Peach twig borer Scale insects (Brown soft scale, Forbes scale, Lecanium scale, Olive scale, Oystershell scale, San Jose scale)	3 to 3 3/4	For dormant or delayed dormant timing, apply in combination with a recommended dormant oil. Refer to the dormant oil product label for additional use directions and restrictions.

RESTRICTIONS AND PRECAUTIONS: STONE FRUIT

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply within 3 days of harvest, except in California. In California, do not apply within 1 day of harvest.
- Do not apply more than a total of 10 1/2 fluid ounces per 1000 SQ. FT. per crop.
- Do not apply more than a total of 3 3/4 fluid ounces per 1000 SQ. FT. at the dormant or delayed dormant timing.
- Do not apply more than a total of 6 3/4 fluid ounces per 1000 SQ. FT. during the production season.

18/62

TREE NUT CROPS

On all tree nut crops, apply in sufficient volume for adequate coverage. This will vary depending on the pest and its severity, the tree condition, size, and density, and other factors.

PISTACHIOS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Pistachios	Brown soft scale Lecanium scale Navel orangeworm	2 1/4 to 3 3/4	Repeat applications as necessary up to a total of 4 times per crop (including any applications at the dormant or delayed dormant timing) but not more often than once every 7 days. For scale control, apply when crawlers are present.
	Scale insects	3 to 3 3/4	For dormant or delayed dormant timing, apply in combination with a recommended dormant oil. Refer to the dormant oil product label for additional use directions and restrictions.

RESTRICTIONS AND PRECAUTIONS: PISTACHIOS

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply within 14 days of harvest.
- Do not apply more than a total of 11 1/4 fluid ounces per 1000 SQ. FT. per crop, including any application at the dormant or delayed dormant timing.

19/62

TREE NUTS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
<p>Tree Nuts: Almonds, Chestnuts, Filberts, Pecans, Walnuts</p>	<p>Black margined aphid Calico scale Codling moth European fruit lecanium Fall webworm Filbert aphid Filbert leafroller Filbertworm Frosted scale Fruittree leafroller Hickory shuckworm Lesser webworm Navel orangeworm Peach twig borer Pecan leaf phylloxera Pecan stem phylloxera Pecan nut casebearer Pecan spittlebug Pecan weevil San Jose scale Twig girdler Walnut caterpillar</p>	<p>1 1/2 to 3 3/4</p>	<p>OBSERVE BEE CAUTION</p> <p>Repeat applications as necessary up to a total of 4 times per crop (including any applications at the dormant or delayed dormant timing) but not more often than once every 7 days.</p> <p>Use lower rates for pests attacking leaves. Use higher rates for pests attacking fruit and for higher infestations.</p> <p>For scale control, apply when crawlers are present.</p> <p>For peach twig borer, best results with foliar applications have been found by making applications in "popcorn" or petal fall stages when the May brood begins to hatch.</p> <p>For navel orangeworm in almonds and walnuts, best results have been found by timing early and midseason applications to correspond with moth flight peaks.</p> <p>For filbert leafroller, best results have been found by making applications when eggs are hatching, repeating application on first appearance of moths and again 3 to 4 weeks later.</p> <p>For codling moth in walnuts, best results have been found by making applications when average cross-sectional diameters of developing nuts are 0.5 to 0.75 inches and again during middle or late June as needed.</p>
	<p>Chestnut weevil European earwig</p>	<p>3 to 3 3/4</p>	<p>For chestnut weevil, best results have been found with 4 applications at weekly intervals beginning in late July. The last application should be made prior to shuck split.</p> <p>For European earwig, thorough coverage of trunks, branches, and nuts is needed for best results.</p>
<p>Almonds only</p>	<p>Peach twig borer Scale insects</p>	<p>3 to 3 3/4</p>	<p>For dormant or delayed dormant timing, apply in combination with a recommended dormant oil. Refer to the dormant oil product label for additional use directions and restrictions.</p>

RESTRICTIONS AND PRECAUTIONS: TREE NUTS

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply within 14 days of harvest.
- Do not apply more than a total of 11 1/4 fluid ounces per 1000 SQ. FT. per crop, including any application at the dormant or delayed dormant timing.

20/02

TREES AND ORNAMENTALS

Apply in sufficient volume for adequate coverage. This will vary depending on the plant or tree size, density, and stage of growth.

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS	
Trees and Ornamentals: Roses, Flowers, Other Herbaceous Plants, Woody Plants, and Shrubs	Ants Apple aphid Armyworm Ash whitefly Azalea leafminer Bagworms Balsam twig aphid Birch leafminer Blister beetle Boxelder bug Boxwood leafminer Brown tail moth Cankerworms Catalpa sphinx Chiggers Cooley spruce gall adelgid Cutworms Cypress tip moth Douglas-fir tussock moth Eastern spruce gall adelgid Elm leaf aphid Elm leaf beetle Elm spanworm Eriophyid mites European pine shoot moth Fall armyworm Flea beetle Fuchsia gall mite Fuller rose beetle Gall midges Gall wasps Greenstriped mapleworm Grasshoppers Hackberry nipplegall maker Holly bud moth Holly leafminer Jackpine budworm Japanese beetle Jeffrey pine needleminer June beetles Lace bugs Leafhoppers Leafrollers Locust borer	Maple leafcutter Mealy bugs Mimosa webworm Nantucket pine tip moth Oak leafminers Oak moth Oak skeletonizer Oakworm complex Oleander caterpillar Olive ash borer Orange-striped oakworm Periodical cicada Pine looper Pine sawfly Pine spittlebug Pitch pine tip moth Spruce budworm Plant bugs Poinsettia hornworm Psyllids Puss caterpillar Redhumped oakworm Rose aphid Rose chafer Rose slug Saddled prominent Sawflies (exposed) Scale insects (crawlers) Sowbugs Spiney elm caterpillar Springtails Spruce needleminer Subtropical pine tip moth Tent caterpillars Thorn bug Thrips (exposed) Ticks Walnut caterpillar Webworms Western hemlock looper Western spruce budworm Willow leaf beetles Woolly gall aphid Yellow poplar weevil	3/4	Observe plant response precautions. Obtain thorough coverage of upper and lower leaf surfaces. The addition of a sticker may improve residual control. To control scale insects, treat trunks, stems and twigs in addition to plant foliage. For optimum worm control, treat when pests are small. Do not use on syrup-producing sugar maples where sap is harvested. Applications for control of maple leafcutter on sugar maple should be made when larvae are in 2nd instar after mining and as cases are being formed. Repeat treatments as necessary up to a total of 6 times per year but not more often than once every 7 days. For gypsy moth control, use the higher rate for heavy infestations.
	Gypsy Moth		1/2 to 3/4	

21/62

TREES AND ORNAMENTALS, CONTINUED

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
<p>Trees and Ornamentals: Roses, Flowers, Other Herbaceous Plants, Woody Plants, and Shrubs</p>	<p>Elm bark beetle Ips engraver beetles Mountain pine beetle Roundheaded pine beetle Spruce beetle Western pine beetle</p>	<p>2% solution (5 fluid ounces per gallon)</p>	<p>Direct Trunk Treatment: Effective as a preventative treatment only. Repeat annually as required to prevent beetle attacks. Apply 1 gallon of spray per 50 square feet of bark prior to beetle flight or host-tree attack. Treat tree trunk from ground level up, until trunk diameter is less than 5 inches. For elm bark beetle: apply approximately 20-30 gallons of spray mixture for each 50 feet of elm tree for thorough coverage of all bark surfaces on trunks, limbs and twigs. Do not make more than 2 applications per year or repeat applications more often than once every six months.</p>

RESTRICTIONS AND PRECAUTIONS: TREES AND ORNAMENTALS

- For trees taller than 10 feet, consider hiring a licensed professional.
- Avoid direct application to lakes, streams and ponds.
- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

22/62

TURFGRASS

Apply the recommended rates using pressure-type equipment in sufficient spray volume for thorough coverage and thatch penetration.

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Turfgrass: golf turf, sports fields, domestic and commercial lawns, cemeteries, parks, campsites and recreational areas.	Ants Armyworm Centipedes Chiggers Cutworms Earwigs Essex skipper European chafer Fall armyworm Fiery skipper Grasshoppers Green June beetle larvae Leafhoppers Lucerne moth Millipedes Mosquitoes (adults) Scarab beetle adults (such as May beetle, June beetle, Japanese beetle, green June beetle) Sowbugs Spittlebugs Springtails Ticks Yellowstriped armyworm	1 1/2 to 3	<p>For Armyworm, Cutworm, and Fall Armyworm Control: Do not irrigate treated areas for 24 hrs. following insecticide application.</p> <p>For Green June Beetle Grub (larvae) Control: Make applications when grubs are feeding near the soil surface. Water or irrigate turfgrass soon after treatment.</p> <p>Repeat applications as necessary up to a total of 4 times per year but not more often than once every 7 days.</p>
	Chinch bugs Sod Webworm (lawn moths)	4 1/2 to 6	<p>For Chinch bug Control: Treat entire grass area rather than just damaged areas. Irrigation prior to treatment will aid in penetration of insecticide into turfgrass. Do not irrigate treated areas within 24 hrs. following insecticide application.</p>
	Bluegrass billbug larvae European crane fly Fleas White grubs (such as Japanese beetle, Chafer beetle, and <i>Phyllophaga</i> spp. larvae) Black turfgrass ataenius beetle larvae Hyperoides weevil (bluegrass weevil) larvae	6	<p>For European Crane Fly Control: Treatments should be applied in early spring, April 1 to April 15, or as recommended by local Agricultural Extension Service agents. Water or irrigate turfgrass soon after treatment.</p> <p>For White Grub Control: Applications should be made when grubs are feeding near the soil surface, usually during late March through May, or July through early September, or as recommended by local Agricultural Extension Service agents. Water or irrigate turfgrass soon after treatment.</p> <p>Repeat applications as necessary up to 2 times per year but not more often than once every 7 days.</p>

RESTRICTIONS AND PRECAUTIONS: TURFGRASS

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

23/62

CONTROL OF SPECIFIC PESTS ACROSS MULTIPLE SITES

GRASSHOPPERS

CROP/SITE	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
All crops/sites on this label	Grasshoppers	3/8 to 1 1/8*	Apply 3/8 to 4/7 fluid ounces per 1000 SQ.FT. of this product for nymphs on small plants or sparse vegetation. Apply 3/4 to 1 1/8 fluid ounces per 1000 SQ.FT. for mature grasshoppers or applications to dense foliage or if extended residual control is desired. Be certain spray volumes are appropriate to assure adequate coverage.

RESTRICTIONS AND PRECAUTIONS: GRASSHOPPER CONTROL

- ***NOTE:** Refer to individual site listings elsewhere on this label for use limitations and restrictions. Do not use rates higher than listed for the site or exceed other use restrictions.

CONTROL OF TICKS WHICH VECTOR LYME DISEASE

For control of juvenile and adult ticks which vector Lyme Disease, apply the recommended amount in sufficient volume for thorough coverage.

CROP/SITE	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
All crops/sites on this label	<i>Ixodes</i> spp. (Deer tick, Bear tick, Black legged tick) <i>Amblyomma</i> spp. (Lone star tick)	3/4 to 1 1/2*	Use the high rate for heavy tick infestations.* Use higher spray volumes for dense ground cover or heavy leaf litter. Target applications for nymphal control in late spring or early summer. Control of adult tick can be obtained with late summer and fall applications. Do not use spot treatments. Treat entire area and perimeter areas where exposure to ticks may occur. Ticks may be reintroduced from surrounding areas on host animals. Retreat as necessary to maintain adequate control levels*.

RESTRICTIONS AND PRECAUTIONS: CONTROL OF TICKS WHICH VECTOR LYME DISEASE

- ***NOTE:** Refer to individual site listings elsewhere on this label for use limitations and restrictions. Do not use rates higher than listed for the site or exceed other use restrictions.
- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATION OR UNTIL SPRAYS HAVE DRIED.

24/62

IMPORTED FIRE ANTS

CROP/SITE	PEST	FLUID OUNCES OF SEVIN® RP4 PER VOLUME OF WATER	SPECIFIC DIRECTIONS
All crops/sites on this label	Imported fire ants	3/4 fluid ounce per gallon	DRENCH APPLICATION: 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 a bucket, can or other appropriate equipment. Thoroughly wet mound and surrounding areas to a 4 ft diameter (12 sq.ft.). Do not disturb mound prior to treatment. Pour solution from a height of about three feet to give sufficient force to break mound apex and flow into ant tunnels. For best results apply in cool weather (65-80°F) or in early morning or late evening hours. Repeat application if mound activity resumes after 7 days. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.
All crops/sites on this label	Imported fire ants	1 1/2 quarts per 100 gallons	FOLIAR APPLICATION: (outdoor use only): Avoid contact with foliage and treat only the growing media when using on bedding plants. Do not make more than one application, either as a root dip or drench treatments (applied to the point of saturation).

RESTRICTIONS AND PRECAUTIONS: IMPORTED FIRE ANT CONTROL

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL DRENCH HAS DRIED.
- DO NOT USE IN GREENHOUSES.
- ***NOTE:** DO NOT USE ON ANY FOOD CROP NOT LISTED ON THIS LABEL. Refer to the specific crop section for additional restrictions and precautions.
- To prepare small amounts, use 3/4 fluid ounce (approximately 1 1/2 tablespoons) of SEVIN® BRAND RP4 per each gallon of mix where 3/4 quarts per 100 gallons are indicated.

ADULT MOSQUITO CONTROL

Apply in sufficient gallonage for thorough coverage.

CROP/SITE	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
All crops/sites on this label	Mosquitoes (adults)	3/16 to 3/4*	OBSERVE BEE CAUTION. Treat shrubbery and areas where adult mosquitoes congregate. Treat when adult mosquitoes are active in early mornings or late evenings. Repeat applications as necessary*.

RESTRICTIONS AND PRECAUTIONS: ADULT MOSQUITO CONTROL

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATION OR UNTIL SPRAYS HAVE DRIED.
- **CAUTION:** May kill shrimp and crabs. Do not use in areas where these are important resources.
- ***NOTE:** Refer to individual site listings elsewhere on this label for use limitations and restrictions. Do not use rates higher than listed for the site or exceed other use restrictions.
- To prepare small volumes of spray mixture, use 1/4 fl. oz. (approximately 2 teaspoons) of this product in an adequate amount of water and apply to 500 sq.ft. where rates of 3/4 fluid ounces per 1000 SQ.FT. are indicated.

25762

NUISANCE PEST CONTROL

For use as a perimeter treatment to prevent infestations of buildings, apply the specified dosage in a band 6 to 10 feet wide around the outside perimeter of the structure.

PEST	RATE OF SEVIN® RP4	SPECIFIC DIRECTIONS
Ants Bees Brown dog tick Centipedes Cockroaches Crickets Darkling beetle (lesser mealworm or litter beetle) Earwigs Firebrats Fleas Millipedes Scorpions Silverfish Spiders Wasps	1% solution or 2 1/2 fluid ounces per gallon	Observe plant response precautions. Apply as a coarse wet spray in a band 6 to 10 feet wide around the outside perimeter of buildings. Confine applications to areas immediately adjacent to the building. Direct application to the structure should be minimal and restricted to cracks, crevices, and areas where insects tend to congregate. For use in and around flower beds and ornamental plantings, apply as a coarse wet spray in and around plant beds. May be applied to outdoor sleeping quarters of pets. Do not treat animals. Do not allow animals to use treated area until sprays have dried.

RESTRICTIONS AND PRECAUTIONS: NUISANCE PEST CONTROL

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.
- NOTE: Staining may occur on certain surfaces such as stucco, brick, cinder block, wood, fabrics, and carpet. Spray deposits on painted or stained surfaces of finishes (eg., cars, house trailers, boats, etc.) should be removed immediately by washing to prevent discoloration. Avoid application to surfaces where visible spray residues are objectionable. Staining of fabrics and carpet may be permanent.

2/6/02

DIRECTIONS FOR USE WITH A HOSE END APPLICATOR

VEGETABLES EXCEPT ASPARAGUS AND SWEET CORN

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Broccoli Brussel Sprouts Cauliflower Cabbage Celery Chinese Cabbage Collards Cowpeas Cucumbers Dandelion Eggplant Endive Fresh and Dried Beans <i>(Phaseolus species</i> <i>including snap, navy</i> <i>and kidney)</i> Fresh and Dried Peas <i>(Pisum species)</i> Kale Kohlrabi Lettuce (head and leaf) Lentils Melons Mustard Greens Parsley Peanuts Peppers Pumpkins Tomatoes Root and Tuber Crops: Garden Beets, Carrots, Horseradish, Parsnips, Radishes, Rutabagas, Salsify, Potatoes Soybeans Southern Peas Spinach Squash Sweet Potatoes Swiss Chard	Alfalfa caterpillar Armyworm Aster leafhopper Bean leaf beetle Blister beetle Colorado potato beetle Cucumber beetles Cutworms Diamondback moth European corn borer Fall armyworm Flea beetles Grape colaspis Grasshoppers Green cloverworm Harlequin bug Imported cabbageworm Japanese beetle Lace bugs Leafhoppers Melonworm Mexican bean beetle Pickleworm Rednecked peanutworm Spittlebugs Squash bugs Sweet potato hornworm Sweet potato weevil Tarnished plant bugs Three cornered alfalfa hopper Thrips	Tomato fruitworm Tomato hornworm Tomato pinworm Tortoise beetles Velvetbean caterpillar Webworms Western bean cutworm Whitefringed beetle adults	3/4 For optimum control of squash bugs time sprays for early morning or late afternoon. When disease transmission is suspected, monitor plants following application and retreat if reinfestation occurs. For cutworm control, this product is most effective against species which feed on the upper portions of the plant. For optimum control of thrips, ensure adequate coverage for the underside of leaves.

RESTRICTIONS AND PRECAUTIONS: VEGETABLES

- For Broccoli, Brussel Sprouts, Cauliflower, Cabbage, Cucumbers, Eggplant, Kohlrabi, Melons, Peppers, Pumpkins, Tomatoes and Squash do not apply within 3 days of harvest.
- For Root and Tuber Crops and Sweet Potatoes do not apply within 7 days of harvest.
- For Celery, Chinese Cabbage, Collards, Cowpeas, Dandelion, Endive, Fresh and Dried Beans, Fresh and Dried Peas, Kale, Lettuce (head and leaf), Lentils, Mustard Greens, Parsley, Peanuts, Soybeans, Southern Peas, Spinach and Swiss Chard do not apply within 14 days of harvest.
- For all vegetables do not make more than a total of 4 applications per year. Do not apply more often than once every 7 days.
- For all vegetables do not apply more than a total of 4 1/2 fluid ounces per 1000 sq.ft. per year.

27/62

DIRECTIONS FOR USE WITH A HOSE END APPLICATOR, CONTINUED

ASPARAGUS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Asparagus	Apache cicada Asparagus beetle Cutworms Grasshoppers	1 1/2	Repeat applications as necessary up to a total of 3 times prior to harvest or a total of 5 times per crop but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
		3	Application to ferns or brush growth following harvest of spears: Repeat applications as necessary but not more often than every 7 days. Do not make more than a total of 5 applications per year to spears and ferns combined.

RESTRICTIONS AND PRECAUTIONS: ASPARAGUS

- Do not apply within 1 day of harvest.
- Do not apply more than a total of 9 fluid ounces per 1000 SQ.FT. before harvest of spears.
- Do not apply more than a total of 15 fluid ounces per 1000 SQ.FT. per year.

28/62

DIRECTIONS FOR USE WITH HOSE END APPLICATOR, CONTINUED

SWEET CORN

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS																
Sweet Corn	<table border="0"> <tr> <td>Armyworm</td> <td>Grasshoppers</td> </tr> <tr> <td>Chinch bugs</td> <td>Japanese beetle</td> </tr> <tr> <td>Corn earworm</td> <td>Leafhoppers</td> </tr> <tr> <td>Corn rootworm adults</td> <td>Sap beetles</td> </tr> <tr> <td>Cutworms</td> <td>Southwestern corn borer</td> </tr> <tr> <td>European corn borer</td> <td>Western bean cutworm</td> </tr> <tr> <td>Fall armyworm</td> <td></td> </tr> <tr> <td>Flea beetles</td> <td></td> </tr> </table>	Armyworm	Grasshoppers	Chinch bugs	Japanese beetle	Corn earworm	Leafhoppers	Corn rootworm adults	Sap beetles	Cutworms	Southwestern corn borer	European corn borer	Western bean cutworm	Fall armyworm		Flea beetles		1 1/2	<p>OBSERVE BEE CAUTION</p> <p>Repeat applications as necessary up to a total of 8 times but not more often than once every 7 days. Optimum timing and good coverage are essential for effective control.</p> <p>For insects attacking silks and ears, insecticide sprays should be applied starting when first silks appear and continuing until silks begin to dry. During silking, the minimum retreatment interval (7 days) may not provide adequate levels of protection under conditions of rapid growth or severe pest pressure. The use of an alternative product should be considered in conjunction with this product.</p> <p>For optimum chinch bug control, apply at least 20 gallons of total spray mixture per acre and direct spray toward stalk to provide thorough coverage.</p> <p>For optimum European corn borer control, do not apply less than 15 gallons of total spray mixture.</p> <p>For western bean cutworm, treat when infestation average 15% and at 90 to 100% tassel emergence. Treatment after 100% silk emergence will reduce effectiveness.</p> <p>For optimum cutworm control, apply in a 12-inch band, over the row, using sufficient volume of water to obtain thorough coverage.</p> <p>For broadcast application, use at least 20 gallons of total spray mixture per acre. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.</p>
Armyworm	Grasshoppers																		
Chinch bugs	Japanese beetle																		
Corn earworm	Leafhoppers																		
Corn rootworm adults	Sap beetles																		
Cutworms	Southwestern corn borer																		
European corn borer	Western bean cutworm																		
Fall armyworm																			
Flea beetles																			

RESTRICTIONS AND PRECAUTIONS: SWEET CORN

- Do not apply within 2 days of harvest of ears or within 14 days of harvest or grazing of forage.
- Do not apply more than a total of 12 fluid ounces per 1000 SQ.FT. per crop.

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DIRECTIONS FOR USE WITH HOSE END APPLICATOR, CONTINUED

SMALL FRUITS AND BERRIES

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Small Fruits and Berries: Caneberries, Blueberries, Cranberries, Grapes, Strawberries	Blueberry maggot Cherry fruitworm Cranberry fireworm Cranberry fruitworms Cranberry twig girdler Cutworms Eight-spotted forester Elm spanworm European fruit lecanium European raspberry aphid Flea beetles Grape berry moth Grape leaffolder Grape leafroller Grasshoppers Gypsy moth Japanese beetle June beetles Leafhoppers Leafrollers Meadow spittlebug Omnivorous leaf-tier	Omnivorous leafroller Orange tortrix Raspberry fruitworm Raspberry sawfly Redbanded leafroller Rose chafer Saltmarsh caterpillar Snowy tree cricket Spaganothus worm Strawberry bud weevil Strawberry clipper Strawberry fruitworm Strawberry leafroller Strawberry weevil Tarnished plant bug Western grapeleaf skeletonizer Western yellowstriped armyworm	1 1/2 OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 5 times but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant. In grapes for grape leaffolder control, apply before first brood larvae emerge from rolls. In grapes, do not concentrate spray on the bunch or visible residues may result.

RESTRICTIONS AND PRECAUTIONS: SMALL FRUITS AND BERRIES

- Do not apply within 7 days of harvest.
- Do not apply more than a total of 7 1/2 fluid ounces per 1000 SQ.FT. per crop.
- **CAUTION:** Use in cranberries may kill shrimp and crabs. Do not use in areas where these are important resources.
- Carbaryl may injure Early Dawn and Sunrise varieties of strawberries.

DIRECTIONS FOR USE WITH HOSE END APPLICATOR, CONTINUED

TREE FRUIT CROPS

On all tree fruit crops, apply in sufficient volume for adequate coverage. This will vary depending on the pest and its severity, the tree condition, size, and density, and other factors.

CITRUS FRUITS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ.FT.	SPECIFIC DIRECTIONS
Citrus Fruits	Apopka weevil (adult) Orange Tortrix Avocado leafroller Plant bugs California orangedog Scale insects (such Citrus cutworm as Black scale, Citrus root weevils brown soft scale, (adults) California red scale Citrus rust mite (except in Eriophyid mites California), citrus Fruitree leafroller snow scale, yellow Fuller Rose Beetle scale) Grasshoppers Western tussock Little leaf notcher moth (adult)	3 3/4	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 8 times but not more often than once every 14 days. For scale control, apply when crawlers are present. For best control of Eriophyid mites including citrus rust mite, apply when pest populations are low.
	California only: California red scale	3 3/4	Do not make more than 1 application per season at rates above 7 1/2 fluid ounces. Apply when crawlers are present.

RESTRICTIONS AND PRECAUTIONS: CITRUS FRUITS

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply within 5 days of harvest.
- Do not apply more than a total of 15 fluid ounces per 1000 SQ.FT. per crop.

DIRECTIONS FOR USE WITH HOSE END APPLICATOR, CONTINUED

STONE FRUIT AND POME FRUIT

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
<p>Stone Fruits: Apricots, Cherries, Nectarines, Peaches, Plums and Prunes</p> <p>Pome Fruits: Apples, Pears, Loquats, Crabapples and Oriental Pears</p>	<p>Apple aphid Apple maggot Apple mealybug Apple pandemis Apple rust mite Bagworms Black cherry aphid California pearslug (pear sawfly) Cherry fruitworm Cherry maggot (Cherry fruit fly) Codling moth Cucumber beetles Eastern tent caterpillar Eyespotted bud moth European apple sawfly European earwig Fruittree leafroller Green fruitworm Grasshoppers Gypsy moth Japanese beetle June beetle Lesser appleworm Lesser peachtree borer Lygus bugs</p> <p>Mealy plum aphid Orange tortrix Oriental fruit moth Peach twig borer Pearleaf blister mite Pear psylla Pear rust mite Periodical cicada Plum curculio Prune leafhopper Redbanded leafroller Rose chafer Rosey apple aphid Scale insects (such as Brown soft scale, Forbes scale, Lecanium scale, Olive scale, Oystershell scale, San Jose scale) Tarnished plant bug Tentiform leafminers Tussock moth Variegated leafroller White apple leafhopper Woolly apple aphid Yellowheaded fireworm</p>	<p>2 1/4</p>	<p>OBSERVE BEE CAUTION.</p> <p>Repeat applications as necessary up to a total of 3 times per crop but not more often than once every 7 days. An additional application at the dormant or delayed dormant timing may be made.</p> <p>For optimum scale control, apply when crawlers are present.</p> <p>For lesser peachtree borer, best results have been found by thoroughly spraying limbs and tree trunks at weekly intervals during moth flight.</p> <p>For psylla control, apply when eggs hatch or young nymphs are present.</p>

RESTRICTIONS AND PRECAUTIONS: STONE FRUIT AND POME FRUIT

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply to Quince.
- Do not apply within 3 days of harvest.
- Do not apply more than a total of 10 1/2 fluid ounces per 1000 SQ. FT. per crop.
- For stone fruits, do not apply more than a total of 6 3/4 fluid ounces per 1000 SQ. FT. during the production season.

DIRECTIONS FOR USE WITH HOSE END APPLICATOR, CONTINUED

TREE NUT CROPS

On all tree nut crops, apply in sufficient volume for adequate coverage. This will vary depending on the pest and its severity, the tree condition, size, and density, and other factors.

TREE NUTS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Tree Nuts: Almonds, Chestnuts, Filberts, Pecans, Walnuts Pistachios	Black margined aphid Brown soft scale Catco scale Chestnut weevil Codling moth European earwig European fruit lecanium Fall websorm Filbert aphid Filbert leafroller Filbertworm Frosted scale Fruittree leafroller Grasshoppers Hickory shuckworm Lecanium scale Lesser webworm Navel orangeworm Peach twig borer Pecan leaf phylloxera Pecan stem phylloxera Pecan nut casebearer Pecan spittlebug Pecan weevil San Jose scale Twig girdler Walnut caterpillar	3 3/4	<p>OBSERVE BEE CAUTION</p> <p>Repeat applications as necessary up to a total of 4 times per crop (including any applications at the dormant or delayed dormant timing) but not more often than once every 7 days.</p> <p>Use lower rates for pests attacking leaves. Use higher rates for pests attacking fruit and for higher infestations.</p> <p>For scale control, apply when crawlers are present.</p> <p>For chestnut weevil, best results have been found with 4 applications at weekly intervals beginning in late July. The last application should be made prior to shuck split.</p> <p>For peach twig borer, best results with foliar applications have been found by making applications in "popcorn" or petal fall stages when the May brod begins to hatch.</p> <p>For navel orangeworm in almonds and walnuts, best results have been found by timing early and midseason applications to correspond with moth flight peaks.</p> <p>For filbert leafroller, best results have been found by making applications when eggs are hatching, repeating application on first appearance of moths and again 3 to 4 weeks later.</p> <p>For codling moth in walnuts, best results have been found by making applications when average cross-sectional diameters of developing nuts are 0.5 to 0.75 inches and again during middle or late June as needed.</p> <p>For European earwig, thorough coverage of trunks, branches, and nuts is needed for best results.</p>

RESTRICTIONS AND PRECAUTIONS: TREE NUTS

- For trees taller than 10 feet, consider hiring a licensed professional.
- Do not apply within 14 days of harvest.
- Do not apply more than a total of 11 1/4 fluid ounces per 1000 SQ. FT. per crop, including any application at the dormant or delayed dormant timing.

DIRECTIONS FOR USE WITH A HOSE END APPLICATOR, CONTINUED

TURFGRASS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
<p>Turfgrass: golf turf, sports fields, domestic and commercial lawns, cemeteries, parks, campsites and recreational areas.</p>	<p>Ants Armyworm Centipedes Chiggers Cutworms Earwigs Essex skipper European chafer Fall armyworm Fiery skipper Grasshoppers Green June beetle larvae Leafhoppers Lucerne moth Millipedes Mosquitoes (adults) Scarab beetle adults (such as May beetle, June beetle, Japanese beetle, green June beetle) Sowbugs Spittlebugs Springtails Ticks Yellowstriped armyworm</p>	<p>3</p>	<p>For Armyworm, Cutworm, and Fall Armyworm Control: Do not irrigate treated areas for 24 hrs. following insecticide application.</p> <p>For Green June Beetle Grub (larvae) Control: Make applications when grubs are feeding near the soil surface.</p> <p>Repeat applications as necessary up to a total of 4 times per year but not more often than once every 7 days.</p>
	<p>Chinch bugs Sod Webworm (lawn moths) Bluegrass billbug larvae European crane fly Fleas White grubs (such as Japanese beetle, Chafer beetle, and <i>Phyllophaga</i> spp. larvae) Black turfgrass ataenius beetle larvae Hyperoides weevil (bluegrass weevil) larvae</p>	<p>6</p>	<p>For Chinch bug Control: Treat entire grass area rather than just damaged areas. Irrigation prior to treatment will aid in penetration of insecticide into turfgrass. Do not irrigate treated areas within 24 hrs. following insecticide application.</p> <p>For European Crane Fly Control: Treatments should be applied in early spring, April 1 to April 15, or as recommended by local Agricultural Extension Service agents.</p> <p>For White Grub Control: Applications should be made when grubs are feeding near the soil surface, usually during late March through May, or July through early September, or as recommended by local Agricultural Extension Service agents.</p> <p>Repeat applications as necessary up to 2 times per year but not more often than once every 7 days.</p>

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DIRECTIONS FOR USE WITH A HOSE END APPLICATOR, CONTINUED

TREES AND ORNAMENTALS

CROP	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
Trees and Ornamentals: Roses, Flowers, Other Herbaceous Plants, Woody Plants, and Shrubs	Ants Apple aphid Armyworm Ash whitefly Azalea leafminer Bagworms Balsam twig aphid Birch leafminer Blister beetle Boxelder bug Boxwood leafminer Brown tail moth Cankerworms Catalpa sphinx Chiggers Cooley spruce gall adelgid Cutworms Cypress tip moth Douglas-fir tussock moth Eastern spruce gall adelgid Elm leaf aphid Elm leaf beetle Elm spanworm Eriophyid mites European pine shoot moth Fall armyworm Flea beetle Fuchsia gall mite Fuller rose beetle Gall midges Gall wasps Greenstriped mapleworm Grasshoppers Gypsy Moth Hackberry nipplegall maker Holly bud moth Holly leafminer Jackpine budworm Japanese beetle Jeffrey pine needleminer June beetles Lace bugs Leafhoppers Leafrollers Locust borer	Maple leafcutter Mealy bugs Mimosa webworm Nantucket pine tip moth Oak leafminers Oak moth Oak skeletonizer Oakworm complex Oleander caterpillar Olive ash borer Orange-striped oakworm Periodical cicada Pine looper Pine sawfly Pine spittlebug Pitch pine tip moth Spruce budworm Plant bugs Poinsettia hornworm Psyllids Puss caterpillar Redhumped oakworm Rose aphid Rose chafer Rose slug Saddled prominent Sawflies (exposed) Scale insects (crawlers) Sowbugs Spiney elm caterpillar Springtails Spruce needleminer Subtropical pine tip moth Tent caterpillars Thorn bug Thrips (exposed) Ticks Walnut caterpillar Webworms Western hemlock looper Western spruce budworm Willow leaf beetles Woolly gall aphid Yellow poplar weevil	3/4 Observe directions on applicator label.

RESTRICTIONS AND PRECAUTIONS: TREES AND ORNAMENTALS

- For trees taller than 10 feet, consider hiring a licensed professional.

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DIRECTIONS FOR USE WITH A HOSE END APPLICATOR, CONTINUED

CONTROL OF SPECIFIC PESTS ACROSS MULTIPLE SITES

CROP/SITE	PEST	FLUID OUNCES OF SEVIN® RP4 PER 1000 SQ. FT.	SPECIFIC DIRECTIONS
<p>Ticks Which Vector Lyme Disease</p> <p>All crops/sites on this label</p>	<p><i>Ixodes</i> spp. (Deer tick, Bear tick, Black legged tick)</p> <p><i>Amblyomma</i> spp. (Lone star tick)</p>	<p>3/4 to 1 1/2*</p>	<p>Use the high rate for heavy tick infestations.*</p> <p>Use higher spray volumes for dense ground cover or heavy leaf litter.</p> <p>Target applications for nymphal control in late spring or early summer. Control of adult tick can be obtained with late summer and fall applications.</p> <p>Do not use spot treatments. Treat entire area and perimeter areas where exposure to ticks may occur. Ticks may be reintroduced from surrounding areas on host animals. Retreat as necessary to maintain adequate control levels*.</p>
<p>Imported Fire Ants</p> <p>All crops/sites on this label</p>	<p>Imported fire ants</p>	<p>3/4 fl.oz. per mound</p>	<p>MOUND DRENCH APPLICATION:</p> <p>Apply approximately 2 gallons of the hose-end spray solution over the surface of the mound. Thoroughly wet mound and surrounding areas to a 4 ft diameter (12 sq.ft.). Do not disturb mound prior to treatment. Direct flow at mound to disrupt and allow solution to flow into ant tunnels. For best results apply in cool weather (65-80°F) or in early morning or late evening hours. Repeat application if mound activity resumes after 7 days. Treat new mounds as they appear.</p>
<p>Adult Mosquito Control</p> <p>All crops/sites on this label</p>	<p>Mosquitoes (adults)</p>	<p>3/4</p>	<p>OBSERVE BEE CAUTION.</p> <p>Treat shrubbery and areas where adult mosquitoes congregate. Treat when adult mosquitoes are active in early mornings or late evenings.</p> <p>Repeat applications as necessary*.</p>
<p>Nuisance Pest Control</p>	<p>Ants</p> <p>Bees</p> <p>Brown dog tick</p> <p>Centipedes</p> <p>Cockroaches</p> <p>Crickets</p> <p>Darkling beetle (lesser mealworm or litter beetle)</p> <p>Earwigs</p> <p>Firebrats</p> <p>Fleas</p> <p>Millipedes</p> <p>Scorpions</p> <p>Silverfish</p> <p>Spiders</p> <p>Wasps</p>	<p>6 (as a perimeter treatment)</p>	<p>PERIMETER TREATMENT DIRECTIONS:</p> <p>Observe plant response precautions.</p> <p>Apply as a coarse wet spray in a band 6 to 10 feet wide around the outside perimeter of buildings. Confine applications to areas immediately adjacent to the building. Direct application to the structure should be minimal and restricted to cracks, crevices, and areas where insects tend to congregate.</p> <p>For use in and around flower beds and ornamental plantings, apply as a coarse wet spray in and around plant beds.</p> <p>May be applied to outdoor sleeping quarters of pets. Do not treat animals. Do not allow animals to use treated area until sprays have dried.</p>

RESTRICTIONS AND PRECAUTIONS:

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.
- NOTE: Staining may occur on certain surfaces such as stucco, brick, cinder block, wood, fabrics, and carpet. Spray deposits on painted or stained surfaces of finishes (eg., cars, house trailers, boats, etc.) should be removed immediately by washing to prevent discoloration. Avoid application to surfaces where visible spray residues are objectionable. Staining of fabrics and carpet may be permanent.
- CAUTION: May kill shrimp and crabs. Do not use in areas where these are important resources.

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SPECIFIC USE DIRECTIONS FOR AGRICULTURE AND COMMERCIAL CROP/SITE GROUPINGS:

Asparagus

Brassica Leafy Vegetable Crops

Cereal Grain Crops (Field and Pop Corn; Grain Sorghum; Rice; Sweet Corn; Wheat and Proso Millet)

Cucurbit Vegetables

Flax

Forage Crops (Alfalfa, Clovers, Birdsfoot Trefoil; Pasture and Grasses Grown for Seed; Rangeland)

Fruiting Vegetables

Leafy Vegetables

Legume Vegetables

Noncropland (Conservation Reserve Program; Wasteland; Rights-of-Way; Hedgerows; Ditchbanks; Roadsides)

Peanuts

Root and Tuber Crops (Root and Tuber Crops except Sugar Beets and Sweet Potatoes; Sugar Beets; Sweet Potatoes)

Small Fruits and Berries

Sunflower

Tobacco

Tree Fruit Crops (Citrus Fruits; Olives; Pome Fruits; Stone Fruits)

Tree Nut Crops (Pistachios; Tree Nuts)

Forested Areas and Rangeland Trees

Trees and Ornamentals

Turfgrass

Control of Specific Pests Across Multiple Sites

Grasshoppers

Ticks which Vector Lyme Disease

Imported Fire Ants

Adult Mosquito Control

Nuisance Pest Control

INSECT CONTROL

Begin application when insect populations reach recognized economic threshold levels. Consult the Cooperative Extension Service, Consultants, or other qualified authorities to determine appropriate threshold levels for treatment and specific use information in your area. Where a dosage range is indicated, use the lower rate on light to moderate infestations, young plants and early instars and use the higher rate on heavy infestations, mature plants, advanced instars and adults. Thorough and uniform spray coverage is essential for effective control.

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ASPARAGUS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Asparagus	Apache cicada Asparagus beetle	Cutworms	Repeat applications as necessary up to a total of 3 times prior to harvest or a total of 5 times per crop but not more often than once every 3 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
			Application to ferns or brush growth following harvest of spears: Repeat applications as necessary but not more often than every 7 days. Do not make more than a total of 5 applications per year to spears and ferns combined.

RESTRICTIONS AND PRECAUTIONS: ASPARAGUS

- Do not apply within 1 day of harvest.
- Do not apply more than a total of 6 quarts per acre before harvest of spears.
- Do not apply more than a total of 10 quarts per acre per year.

BRASSICA LEAFY VEGETABLES CROPS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Broccoli Brussel Sprouts Cauliflower	Flea beetles Harlequin bug Leafhoppers	1/2 to 1	Repeat applications as needed up to a total of 4 times but not more often than once every 7 days.
Cabbage Chinese Cabbage Collards Kale Kohlrabi Mustard Greens	Armyworm Aster leafhopper Corn earworm Diamondback moth Fall armyworm Imported cabbageworm	Lygus bugs Spittle bugs Stink bugs Tarnished plant bug	1 to 2

RESTRICTIONS AND PRECAUTIONS: BRASSICA LEAFY VEGETABLES

- For Broccoli, Brussel Sprouts, Cabbage Cauliflower, and Kohlrabi, do not apply within 3 days of harvest.
- For Chinese Cabbage, Collards, Kale, and Mustard Greens, do not apply within 14 days of harvest.
- Do not apply more than a total of 6 quarts per acre per crop.

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CEREAL GRAIN CROPS

FIELD CORN AND POPCORN

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Field corn and Popcorn	Armyworm Chinch bugs Corn earworm Corn rootworm adults Fall armyworm Flea beetles	Japanese beetle Sap beetles Southwestern corn borer Leafhoppers	OBSERVE BEE CAUTION. Repeat applications as needed up to a total of 4 times but not more often than once every 14 days. Optimum timing and good coverage are essential for effective control.
	European corn borer	1 1/2 to 2	For optimum chinch bug control, use ground equipment to apply at least 20 gallons of water per acre and direct spray toward stalk to provide thorough coverage. For optimum European corn borer control, do not apply in less than 3 gallons of water per acre by air and 15 gallons of water by ground. For western bean cutworm, treat when infestation averages 15% and at 90 to 100% tassel emergence. Treatment after 100% silk emergence will reduce effectiveness. For optimum cutworm control, apply in a 12-inch band, over the row, using sufficient volume of water to obtain thorough coverage. For broadcast application, use at least 20 gallons by ground or 5 gallons by air per acre. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Western bean cutworm Cutworms	2	

RESTRICTIONS AND PRECAUTIONS: FIELD AND POP CORN

- Do not apply within 48 days of harvest of grain and fodder or within 14 days of harvest or grazing of forage or silage.
- Do not apply more than a total of 8 quarts per acre per crop.

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GRAIN SORGHUM

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Grain Sorghum	Armyworm Chinch bugs Corn earworm	Fall armyworm Stink bugs Webworms	Repeat applications as necessary up to a total of 4 times but not more often than once every 7 days.
	Southwestern corn borer	1 1/2	
	Cutworms	2	Direct spray into forming heads for optimum control of insects attacking heads. For optimum chinch bug control, use high gallonage ground application at the base of plants. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

RESTRICTIONS AND PRECAUTIONS: GRAIN SORGHUM

- Do not apply within 21 days of harvest for grain or fodder or within 14 days of harvest or grazing of forage or silage.
- Do not apply more than a total of 6 quarts per acre per crop.

RICE

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Rice	Armyworm Chinch bugs Fall armyworm	Leafhoppers Stink bugs	Up to 2 applications per crop may be made but not more often than once every 7 days.
	Tadpole shrimp	1 1/2	

RESTRICTIONS AND PRECAUTIONS: RICE

- Do not apply within 14 days of harvest for grain or straw.
- Do not apply more than a total of 4 quarts per acre per crop.
- CAUTION: May kill shrimp, crabs, and crayfish.
- Do not apply propanil herbicides within 15 days before or after application of this product or plant injury will result.

4/1/62

SWEET CORN

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Sweet Corn	Armyworm Chinch bugs Corn earworm Corn rootworm adults Fall armyworm Flea beetles	1 to 2	OBSERVE BEE CAUTION Repeat applications as necessary up to a total of 8 times but not more often than once every 3 days. Optimum timing and good coverage are essential for effective control
	European corn borer	1 1/2 to 2	For insects attacking silks and ears,
	Western bean cutworm Cutworms	2	insecticide sprays should be applied starting when first silks appear and continuing until silks begin to dry. During silking, the minimum retreatment interval (3 days) may not provide adequate levels of protection under conditions of rapid growth or severe pest pressure. The use of an alternative product should be considered in conjunction with this product. For optimum chinch bug control, use ground equipment to apply at least 20 gallons of water per acre and direct spray toward stalk to provide thorough coverage. For optimum European corn borer control, do not apply in less than 3 gallons of water per acre by air and 15 gallons of water by ground. For western bean cutworm, treat when infestation average 15% and at 90 to 100% tassel emergence. Treatment after 100% silk emergence will reduce effectiveness. For optimum cutworm control, apply in a 12-inch band, over the row, using sufficient volume of water to obtain thorough coverage. For broadcast application, use at least 20 gallons by ground or 5 gallons by air per acre. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

RESTRICTIONS AND PRECAUTIONS: SWEET CORN

- Do not apply within 2 days of harvest of ears, within 14 days of harvest or grazing of forage, or within 48 days of harvest of forage.
- Do not apply more than a total of 16 quarts per acre per crop.

4/1/02

WHEAT AND PROSO MILLET

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Wheat Proso Millet DO NOT USE IN CALIFORNIA	Flea beetles	1/2 to 1	Up to 2 applications per crop may be made but not more often than once every 14 days.
	Cereal leaf beetle	1	
	Armyworm Fall armyworm	1 to 1 1/2	Application is effective against eggs, larvae, and adults of the cereal leaf beetle. Application for armyworm control should be made when armyworms are actively feeding on the upper foliage and night temperatures and not expected to drop below 55°F. If applying by air to lush growth, use a minimum spray volume of 5 gallons per acre to optimize coverage.

RESTRICTIONS AND PRECAUTIONS: WHEAT AND PROSO MILLET

- Do not apply within 21 days of harvest for grain or straw or within 7 days of harvest or grazing of forage.
- Do not apply more than a total of 3 quarts per acre per crop.

CUCURBIT VEGETABLES

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Cucurbit Vegetables: Cucumbers Melons Pumpkins Squash	Pickleworm Melonworm	1/2 to 1	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days For optimum control of squash bugs, apply sufficient spray volume for thorough coverage and time sprays for early morning or late afternoon.
	Cucumber beetles Flea beetles Leafhoppers Squash bugs	1	

RESTRICTIONS AND PRECAUTIONS: CUCURBIT VEGETABLES

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 6 quarts per acre per crop.
- Observe plant response precautions.

FLAX

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Flax DO NOT USE IN CALIFORNIA	Armyworm	1 to 1 1/2	Up to 2 applications per crop may be made but not more often than once every 14 days.

RESTRICTIONS AND PRECAUTIONS: FLAX

- Do not apply within 42 days of harvest for seed or straw.
- Do not apply more than a total of 3 quarts per acre per crop.

4/2/02

FORAGE CROPS

ALFALFA, CLOVERS, AND BIRDSFOOT TREFOIL

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS	
Alfalfa, Clovers, and Birdfoot Trefoil	Blister beetles Mexican bean beetle	1/2 to 1	OBSERVE BEE CAUTION. Observe plant response precautions.	
	Alfalfa caterpillar Bean leaf beetle Cucumber beetles Green cloverworm Japanese beetle Leathoppers	Potato leathopper Three cornered alfalfa hopper Thrips Velvetbean caterpillar	1 On dense growth, use 25 to 40 gallons of water per acre with ground equipment to ensure adequate coverage.	
	Alfalfa blotch leafminer Armyworm Cloverhead weevil Corn earworm Cutworms Egyptian alfalfa weevil larvae	Essex skipper European alfalfa beetle Fall armyworm Lygus bugs Stink bugs Webworms Yellow striped armyworm	1 to 1 1/2	For alfalfa weevil larvae, if pretreatment damage is extensive, cut alfalfa and treat the stubble. This product is not effective against adult alfalfa weevils. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Alfalfa weevil larvae (west of the Rocky Mountains)		1 to 1 1/2	
	Alfalfa weevil larvae (east of the Rocky Mountains)		1 1/2	

RESTRICTIONS AND PRECAUTIONS: FORAGE CROPS

- Do not apply more than once per cutting.
- Do not apply within 7 days of harvest or grazing.
- Do not exceed 1 1/2 quarts per acre per cutting.
- Carbaryl may cause a temporary bleaching of tender alfalfa foliage.

PASTURE AND GRASSES GROWN FOR SEED

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Pasture and Grasses Grown for Seed	Armyworm Chinch bugs Essex skipper Fall armyworm Striped grass looper	Thrips Range caterpillar Range crane fly Ticks	1 to 1 1/2 Up to 2 applications per year may be made but not more often than once every 14 days. To control thrips in grasses grown for seed, use high spray pressure to improve penetration into boot. Carefully mark swaths to avoid over-application.

RESTRICTIONS AND PRECAUTIONS: PASTURE AND GRASSES GROWN FOR SEED

- Do not apply within 14 days of harvest or grazing.
- Do not exceed a total of 3 quarts per acre per year.

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RANGELAND

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Rangeland	Black grass bug Grasshoppers Mormon cricket	Range caterpillar Range crane fly	Do not make more than 1 application per year. Carefully mark swaths to avoid over-application.
	Ticks	1	

RESTRICTIONS AND PRECAUTIONS: RANGELAND

- May be harvested or grazed the same day as treatment.
- Do not apply more than 1 quart per acre per year.

FRUITING VEGETABLES

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Fruiting Vegetables: Tomatoes, Peppers, Eggplant	Colorado potato beetle European corn borer Fall armyworm Lace bugs Stink bugs (suppression) Tarnished plant bug Thrips (suppression) Tomato fruitworm	Tomato hornworm Tomato pinworm	Repeat applications as necessary up to a total of 7 times but not more often than once every 7 days. Thorough coverage is essential to effectively suppress stink bugs. When disease transmission is suspected, monitor fields following application and retreat if reinfestation occurs but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Flea beetles Leathoppers	1/2 to 1	
	Cutworms	2	

RESTRICTIONS AND PRECAUTIONS: FRUITING VEGETABLES

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 8 quarts per crop.

LEAFY VEGETABLES

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Leafy vegetables: Celery, Dandelion, Endive, Lettuce (head and leaf), Parsley, Spinach, Swiss Chard	Flea beetles Harlequin bug Leafhoppers	1/2 to 1	Repeat applications as necessary up to a total of 5 times but not more often than once every 7 days.
	Armyworm Aster leafhopper Corn earworm Fall armyworm Imported cabbageworm	Lygus bugs Spittlebugs Stink bugs Tarnished plant bug	

RESTRICTIONS AND PRECAUTIONS: LEAFY VEGETABLES

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 6 quarts per acre per crop.

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LEGUME VEGETABLES

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Legume Vegetables: Soybeans, Fresh and Dried Beans (<i>Phaseolus</i> species including snap, navy and kidney), Fresh and Dried Peas (<i>Pisum</i> species),	Bean leaf beetle Blister beetle Cucumber beetles Grape colaspis Green cloverworm Japanese beetle Mexican bean beetle Velvetbean caterpillar	1/2 to 1	Repeat applications as necessary up to a total of 4 times but not more often than once every 7 days.
	Corn earworm	1/2 to 1 1/2	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
DO NOT USE ON LENTILS IN CALIFORNIA	Alfalfa caterpillar Colorado potato beetle Flea beetles Leafhoppers Three cornered alfalfa hopper Thrips Western bean cutworm	1	Use lower rates for light to moderate populations and smaller instars and to provide maximum survival of beneficial insects and spiders. Use the higher rates for heavy populations and larger instars.
Lentils, Cowpeas, Southern Peas	Alfalfa looper (suppression) Cowpea curculio (suppression) Painted lady (Thistle caterpillar) Pea leaf weevil Pea weevil Saltmarsh caterpillar Woollybean caterpillar Yellowstriped armyworm	1 1/2	
	California only: Corn earworm (suppression) Limabean podborer (suppression)	1 1/2	

RESTRICTIONS AND PRECAUTIONS: LEGUME VEGETABLES

- Do not apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed, or hay.
- Do not apply more than a total of 6 quarts per acre per crop.
- Do not apply a combination of this product and 2,4-DB herbicides to soybeans as crop injury may result.
- Observe plant response precautions.

NONCROPLAND

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Conservation Reserve Program Acreage	Black grass bug	1/4 to 1/2	Up to 2 applications per year may be made but not more often than once every 14 days. Carefully mark swaths to avoid over-application.
Set-Aside Program Acreage Wasteland	Mormon cricket Range caterpillar Range crane fly	1/2 to 1	
Rights-of-Way Hedgerows Ditchbanks Roadsides	Ticks	1 to 1 1/2	

RESTRICTIONS AND PRECAUTIONS: NONCROPLAND

- Do not apply within 14 days of grazing or harvest for forage or hay.
- Do not apply more than a total of 3 quarts per acre per year.

PEANUTS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS	
Peanuts	Blister beetles Mexican bean beetle	1/2 to 1	Repeat applications as necessary up to a total of 5 times but not more often than once every 7 days.	
	Alfalfa caterpillar Bean leaf beetle Cucumber beetle Green cloverworm Japanese beetle Leafhoppers	Rednecked peanutworm Three cornered alfalfa hopper Thrips Velvetbean caterpillar		1
	Armyworm Corn earworm Fall armyworm	Stink bugs Webworms	1 to 1 1/2	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Whitefringed beetle adults	Cutworms	2	

RESTRICTIONS AND PRECAUTIONS: PEANUTS

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 8 quarts per acre per crop.
- Observe plant response precautions.

4/6/02

**ROOT AND TUBER CROPS
ROOT AND TUBER CROPS EXCEPT SUGAR BEETS AND SWEET POTATOES**

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Root and Tuber Crops:	Flea beetles Leafhoppers	1/2 to 1	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days.
Garden Beets, Carrots, Horseradish, Parsnips, Radishes, Rutabagas, Salsify, Potatoes	Armyworm Aster leafhopper Colorado potato beetle Corn earworm Cutworms European corn borer Fall armyworm Lace bugs Lygus bugs Spittlebugs Stink bugs Tarnished plant bug	1 to 2	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

RESTRICTIONS AND PRECAUTIONS: ROOT AND TUBER CROPS EXCEPT SUGAR BEETS AND SWEET POTATOES

- Do not apply within 7 days of harvest.
- Do not apply more than a total of 6 quarts per acre per crop.

SUGAR BEETS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Sugar beets	Armyworm Beet leaf beetle Fall armyworm	Flea beetles Leafhoppers Webworms	Repeat applications as necessary up to a total of 2 times but not more often than once every 14 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Cutworms	1 1/2	

RESTRICTIONS AND PRECAUTIONS: SUGAR BEETS

- Do not apply within 28 days of harvest for roots or forage.
- Do not apply more than a total of 4 quarts per acre per crop.

SWEET POTATOES

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Sweet Potatoes	Corn earworm Cucumber beetles Flea beetles Sweet potato hornworm	Sweet potato weevil Tortoise beetles Whitefringed beetle	Preplant dip for control of sweet potato weevil: Just prior to planting, dip sweet potato cuttings in a suspension containing 2 gallons of this product in 100 gallons of water (2.6 fluid ounces per gallon of water) For foliar sprays, repeat applications as necessary up to a total of 8 times but not more often than once every 7 days.
	Yellowstriped armyworm	2	

RESTRICTIONS AND PRECAUTIONS: SWEET POTATOES

- Do not apply within 7 days of harvest.
- Do not apply more than a total of 8 quarts per acre per crop with in-season sprays.
- Do not apply more than a total of 1.2 quarts per acre as a preplant dip treatment.

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SMALL FRUITS AND BERRIES

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS	
Small Fruits and Berries: Caneberries, Blueberries, Cranberries, Grapes, Strawberries	European fruit lecanium European raspberry aphid Flea beetles Grape leaf folder Grape leafroller Japanese beetle Leafhoppers Leafrollers Meadow spittlebug Omnivorous leaf tier	Rose chafer Snowy tree cricket Strawberry bud weevil Strawberry clipper Strawberry fruitworm Strawberry leafroller Strawberry weevil Western grapeleaf skeletonizer Western yellowstriped armyworm	1 to 2 OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 5 times but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant. In grapes for grape leaf folder control, apply before first brood larvae emerge from rolls.	
	Blueberry maggot Cherry fruitworm Cranberry fireworm Cranberry fruitworms Cranberry twig girdler	Elm spanworm Gypsy moth Spaganothus worm Tarnished plant bug	1 1/2 to 2	In grapes, do not concentrate spray on the bunch or visible residues may result.
	Eight-spotted forester Cutworms Grape berry moth June beetles Omnivorous leafroller	Orange tortrix Raspberry fruitworm Raspberry sawfly Redbanded leafroller Saltmarsh caterpillar	2	

RESTRICTIONS AND PRECAUTIONS: SMALL FRUITS AND BERRIES

- Do not apply within 7 days of harvest.
- Do not apply more than a total of 10 quarts per acre per crop.
- CAUTION: Use in cranberries may kill shrimp and crabs. Do not use in areas where these are important resources.
- Carbaryl may injure Early Dawn and Sunrise varieties of strawberries.

SUNFLOWERS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Sunflowers	Stem weevil Sunflower beetle	1 to 1 1/2	Up to 2 applications may be made but not more often than once every 7 days.
DO NOT USE IN CALIFORNIA	Armyworm Cutworms	1 1/2	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

RESTRICTIONS AND PRECAUTIONS: SUNFLOWERS

- Do not apply within 30 days of grazing or harvest for forage or within 60 days of harvest for seed.
- Do not apply more than a total of 3 quarts per acre per crop.

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TOBACCO

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Tobacco	Budworms Japanese beetle Fall armyworm June beetle Tobacco flea beetles Suckfly Hornworms	1 to 2	Plant bed and Field Treatment Repeat treatments as necessary up to a total of 4 times per crop but not more often than once every 7 days. Use lower rate on young plants (up to knee height). Use at least 10 gallons of prepared spray per acre. Begin treatments when worms are small.

RESTRICTIONS AND PRECAUTIONS: TOBACCO

- Tobacco may be harvested on the day of treatment.
- Do not apply more than a total of 8 quarts per acre per crop.
- Observe plant response precautions.

TREE FRUIT CROPS

On all tree fruit crops, apply in sufficient volume for adequate coverage. This will vary depending on the pest and its severity, the tree condition, size, and density, and other factors.

CITRUS FRUITS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Citrus Fruits	Avocado leafroller Orange Tortrix California orangedog Western tussock Citrus cutworm moth Fruittree leafroller	2 to 3	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 8 times but not more often than once every 14 days.
	Citrus rust mite Plant bugs Eriophyid mites Scale insects [Black scale, brown soft scale, California red scale (except in California), citrus snow scale, yellow scale (except in California)]	3 to 5	For scale control, apply when crawlers are present. For best control of Eriophyid mites including citrus rust mite, apply when pest populations are low.
	Apopka weevil (adult) Fuller Rose Beetle Citrus root weevils Little leaf notcher (adults) (adult)	5 to 7 1/2	
	California only: California red scale Yellow scale	5 to 16	Do not make more than 1 application per season for California red scale. Apply when crawlers are present.

RESTRICTIONS AND PRECAUTIONS: CITRUS FRUITS

- Do not apply within 5 days of harvest.
- Do not apply more than a total of 20 quarts per acre per crop.

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OLIVES

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Olives	Scale insects (olive scale, black scale)	5 to 7 1/2	Up to 2 applications per crop may be made but not more often than once every 14 days.

RESTRICTIONS AND PRECAUTIONS: OLIVES

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 15 quarts per acre per crop.

POME FRUITS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Pome Fruits: Apples, Pears, Loquats, Crabapples, Oriental Pears	White apple leathopper	1/2 to 1 1/2	OBSERVE BEE CAUTION On apples, avoid use during the period from full bloom until 30 days after full bloom unless fruit thinning is desired. Use for pest control during this period also may result in fruit removal.
	Apple aphid Codling moth	1 to 3	Repeat applications as necessary up to a total of 8 times per crop (including thinning sprays on apples) but not more often than once every 14 days. For psylla control, apply when eggs hatch or young nymphs are present. For scale control, apply when crawlers are present.
	Apple aphid Apple maggot Apple mealybug Apple rust mite Bagworms California pearslug (pear sawfly) European apple sawfly Eyespotted bud moth Fruittree leafroller Gypsy moth Japanese beetle Lesser appleworm Lygus bugs Orange tortrix	Pearleaf blister mite Pear psylla Pear rust mite Periodical cicada Plum curculio Redbanded leafroller Rosy apply aphid Scale insects (Forbes scale, Lecanium scale, San Jose scale) Tarnished plant bug Tentiform leafminers Woolly apple aphid Yellowheaded fireworm	1 1/2 to 3

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**POME FRUITS
(continued)**

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Apples Only, for Fruit Thinning		1 to 3	<p>OBSERVE BEE CAUTION</p> <p>Apply 1 to 3 quarts per acre of SEVIN® RP4 between 80% petal fall and 16 mm fruit size. Use the higher rates on hard to thin varieties at the early timing which is the 80% petal fall to 6 mm fruit size. Use the lower rates on easy to thin varieties and at the later thinning period which is the 10 to 16 mm fruit size. The rate to use per acre will depend on varieties, tree size, row spacing, weather conditions at the time of and following applications. Consult with the local fruit thinning experts in your area for the proper rate to use under your conditions.</p> <p>The optimum spray gallonage will depend on the tree size, planting density, row spacing and amount of foliage. Use sufficient spray volume to insure adequate coverage (100 to 400 gallons/acre). Avoid spray to the point of runoff. Reduce spray coverage to the lower portion of the tree since overthinning may occur here.</p> <p>Factors such as climatic temperature, high humidity, frost, tree age, variety, nutrition, previous crop, pruning and bloom may influence fruit thinning results with the product. Exercise caution to avoid possible overthinning. For the most effective results, apply under good drying conditions and when daytime temperatures (°F) will be 70 to low 80's for the following one to three days. Application with daytime temperatures in excess of 80° F may result in overthinning.</p> <p>SEVIN® RP4 may be mixed with other fruit thinners, however, use caution to avoid overthinning and other adverse effects. Consult with local fruit thinning experts in your area for recommendations. Refer to the other product labels for specific use directions.</p> <p>Consult with local fruit thinning experts in your area for advice on the proper use of this product on your varieties under your growing conditions.</p> <p>CAUTION: The use of SEVIN® RP4 may result in fruit deformity under certain environmental conditions. Before using on any variety of apples, the user must weigh the risk versus benefits when using this product, particularly when using between 80% petal fall and 6 mm fruit size. Red Delicious are more sensitive to this phenomenon and in particular, the varieties Bisbee, Red Chief and Vallee Spur are very susceptible to conditions causing fruit deformity. Precipitation and temperatures below 65° F increases the possibility of fruit deformity. The use with summer spray oils and wetting agents may increase the risk of fruit deformity and injury.</p>

RESTRICTIONS AND PRECAUTIONS: POME FRUITS

- Do not apply to Quince.
- Do not use on pears between the tight flower cluster up to the 20 mm fruit size. Use during this period may result in undesirable fruit thinning and/or deformed fruit.
- Do not apply within 3 days of harvest.
- Do not apply more than a total of 15 quarts per acre per crop.
- Do not make more than a total of 8 applications per crop.

FOR PROTECTION OF HONEY BEES:

- Remove all bee hives from orchard to be treated prior to application.
- Do not apply this product if bees are actively foraging in orchard.
- If weed bloom is present, mow the cover crop on the orchard floor prior to applying this product.

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STONE FRUITS

CROP	PEST		QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Stone Fruits: Apricots, Cherries, Nectarines, Peaches, Plums, and Prunes	Apple pandemis Black cherry aphid Cherry fruitworm Cherry maggot (Cherry fruit fly) Codling moth Cucumber beetles Eastern tent caterpillar Eyespotted bud moth European earwig Fruittree leafroller Green fruitworm Gypsy moth Japanese beetle June beetle Lesser peachtree borer Mealy plum aphid	Orange tortrix Oriental fruit moth Peach twig borer Periodical cicada Plum curculio Prune leafhopper Redbanded leafroller Rose chafer Scale insects (Brown soft scale, Forbes scale, Lecanium scale, Olive scale, Oystershell scale, San Jose scale) Tarnished plant bug Tussock moth Variegated leafroller	2 to 3	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 3 times per crop but not more often than once every 7 days. An additional application at the dormant or delayed dormant timing may be made. For optimum scale control, apply when crawlers are present. For lesser peachtree borer, best results have been found by thoroughly spraying limbs and tree trunks at weekly intervals during moth flight.
	California Only: Black cherry aphid Cherry fruitworm Cherry maggot (Cherry fruit fly) Codling moth Cucumber beetles Eyespotted bud moth European earwig Fruittree leafroller Green fruitworm Mealy plum aphid Orange tortrix		3 to 4	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 3 times per crop but not more often than once every 14 days. An additional application at the dormant or delayed dormant timing may be made. For optimum scale control, apply when crawlers are present.
	Peach twig borer Scale insects (Brown soft scale, Forbes scale, Lecanium scale, Olive scale, Oystershell scale, San Jose scale)		4 to 5	For dormant or delayed dormant timing, apply in combination with a recommended dormant oil. Refer to the dormant oil product label for additional use directions and restrictions.

RESTRICTIONS AND PRECAUTIONS: STONE FRUIT

- Do not apply within 3 days of harvest, except in California. In California, do not apply within 1 day of harvest.
- Do not apply more than a total of 14 quarts per acre per crop.
- Do not apply more than a total of 5 quarts per acre at the dormant or delayed dormant timing.
- Do not apply more than a total of 9 quarts per acre during the production season.

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TREE NUT CROPS

On all tree nut crops, apply in sufficient volume for adequate coverage. This will vary depending on the pest and its severity, the tree condition, size, and density, and other factors.

PISTACHIOS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Pistachios	Brown soft scale Lecanium scale Navel orangeworm	3 to 5	Repeat applications as necessary up to a total of 4 times per crop (including any applications at the dormant or delayed dormant timing) but not more often than once every 7 days. For scale control, apply when crawlers are present.
	Scale insects	4 to 5	For dormant or delayed dormant timing, apply in combination with a recommended dormant oil. Refer to the dormant oil product label for additional use directions and restrictions.

RESTRICTIONS AND PRECAUTIONS: PISTACHIOS

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 15 quarts per acre per crop, including any application at the dormant or delayed dormant timing.

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TREE NUTS

CROP	PEST		QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Tree Nuts: Almonds, Chestnuts, Filberts, Pecans, Walnuts	Black margined aphid Calico scale Codling moth European fruit lecanium Fall webworm Filbert aphid Filbert leafroller Filbertworm Frosted scale Fruittree leafroller Hickory shuckworm Lesser webworm	Navel orangeworm Peach twig borer Pecan leaf phylloxera Pecan stem phylloxera Pecan nut casebearer Pecan spittlebug Pecan weevil San Jose scale Twig girdler Walnut caterpillar	2 to 5	<p>OBSERVE BEE CAUTION</p> <p>Repeat applications as necessary up to a total of 4 times per crop (including any applications at the dormant or delayed dormant timing) but not more often than once every 7 days.</p> <p>Use lower rates for pests attacking leaves. Use higher rates for pests attacking fruit and for higher infestations.</p> <p>For scale control, apply when crawlers are present.</p> <p>For peach twig borer, best results with foliar applications have been found by making applications in "popcorn" or petal fall stages when the May brood begins to hatch.</p> <p>For navel orangeworm in almonds and walnuts, best results have been found by timing early and midseason applications to correspond with moth flight peaks.</p> <p>For filbert leafroller, best results have been found by making applications when eggs are hatching, repeating application on first appearance of moths and again 3 to 4 weeks later.</p> <p>For codling moth in walnuts, best results have been found by making applications when average cross-sectional diameters of developing nuts are 0.5 to 0.75 inches and again during middle or late June as needed.</p>
	Chestnut weevil	European earwig	4 to 5	<p>For chestnut weevil, best results have been found with 4 applications at weekly intervals beginning in late July. The last application should be made prior to shuck split.</p> <p>For European earwig, thorough coverage of trunks, branches, and nuts is needed for best results.</p>
Almonds only	Peach twig borer	Scale insects	4 to 5	<p>For dormant or delayed dormant timing, apply in combination with a recommended dormant oil. Refer to the dormant oil product label for additional use directions and restrictions.</p>

RESTRICTIONS AND PRECAUTIONS: TREE NUTS

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 15 quarts per acre per crop, including any application at the dormant or delayed dormant timing.

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FORESTED AREAS AND RANGELAND TREES

Apply in sufficient volume for adequate coverage. This will vary depending on the tree size, density and stage of growth.

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS	
Forested areas: Non-urban Forests, Tree Plantations, Planted Christmas Trees, Parks, Rural Shelter Belts Rangeland Trees	Ants Apple aphid Armyworm Ash whitefly Azalea leafminer Bagworms Balsam twig aphid Birch leafminer Blister beetle Boxelder bug Boxwood leafminer Brown tail moth Cankerworms Catalpa sphinx Chiggers Cooley spruce gall adelgid Cutworms Cypress tip moth Douglas-fir tussock moth Eastern spruce gall adelgid Elm leaf aphid Elm leaf beetle Elm spanworm Eriophyid mites European pine shoot moth Fall armyworm Flea beetle Fuchsia gall mite Fuller rose beetle Gall midges Gall wasps Greenstriped mapleworm Grasshoppers Hackberry nipplegall maker Holly bud moth Holly leafminer Jackpine budworm Japanese beetle Jeffrey pine needleminer June beetles Lace bugs Leafhoppers Leafrollers Locust borer	Maple leafcutter Mealy bugs Mimosa webworm Nantucket pine tip moth Oak leafminers Oak moth Oak skeletonizer Oakworm complex Oleander caterpillar Olive ash borer Orange-striped oakworm Periodical cicada Pine looper Pine sawfly Pine spittlebug Pitch pine tip moth Spruce budworm Plant bugs Poinsettia hornworm Psyllids Puss caterpillar Redhumped oakworm Rose aphid Rose chafer Rose slug Saddled prominer,t Sawflies (exposed) Scale insects (crawlers) Sowbugs Spiney elm caterpillar Springtails Spruce needleminer Subtropical pine tip moth Tent caterpillars Thorn bug Thrips (exposed) Ticks Walnut caterpillar Webworms Western hemlock looper Western spruce budworm Willow leaf beetles Wooly gall aphid Yellow poplar weevil	1	Observe plant response precautions. Obtain thorough coverage of upper and lower leaf surfaces. The addition of a sticker may improve residual control. To control scale insects, treat trunks, stems and twigs in addition to plant foliage. For optimum worm control, treat when pests are small. Do not use on syrup-producing sugar maples where sap is harvested. Applications for control of maple leafcutter on sugar maple should be made when larvae are in 2nd instar after mining and as cases are being formed. Repeat treatments as necessary up to a total of 2 times per year but not more often than once every 7 days. For gypsy moth control, use the higher rate for heavy infestations.
		Gypsy Moth	3/4 to 1	

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FORESTED AREAS AND RANGELAND TREES, CONTINUED

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Forested areas: Non-urban Forests, Tree Plantations, Planted Christmas Trees, Parks, Rural Shelter Belts Rangeland Trees	Elm bark beetle Ips engraver beetles Mountain pine beetle Roundheaded pine beetle Spruce beetle Western pine beetle	2% solution (5 fluid ounces per gallon)	Direct Trunk Treatment: Effective as a preventative treatment only. Repeat annually as required to prevent beetle attacks. Apply 1 gallon of spray per 50 square feet of bark prior to beetle flight or host-tree attack. Treat tree trunk from ground level up, until trunk diameter is less than 5 inches. For elm bark beetle: apply approximately 20- 30 gallons of spray mixture for each 50 feet of elm tree for thorough coverage of all bark surfaces on trunks, limbs and twigs. Do not make more than 2 applications per year or repeat applications more often than once every six months.

RESTRICTIONS AND PRECAUTIONS: FORESTED AREAS AND RANGELAND TREES

- Do not make more than 2 applications per year.
- To prepare small volumes of spray mixture, use 1/3 fl. oz. (approximately 2 teaspoons) of this product in an adequate amount of water and apply to 500 sq.ft. where rates of 1 quart per acre are indicated.
- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

5/6/02

TREES AND ORNAMENTALS

Apply in sufficient volume for adequate coverage. This will vary depending on the plant or tree size, density, and stage of growth.

CROP	PEST		QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Trees and Ornamentals: Roses, Flowers, Other Herbaceous Plants, Woody Plants, Shrubs in Commercial and Residential Areas and in Nursery Production Areas	Ants Apple aphid Armyworm Ash whitefly Azalea leafminer Bagworms Balsam twig aphid Birch leafminer Blister beetle Boxelder bug Boxwood leafminer Brown tail moth Cankerworms Catalpa sphinx Chiggers Cooley spruce gall adelgid Cutworms Cypress tip moth Douglas-fir tussock moth Eastern spruce gall adelgid Elm leaf aphid Elm leaf beetle Elm spanworm Eriophyid mites European pine shoot moth Fall armyworm Flea beetle Fuchsia gall mite Fuller rose beetle Gall midges Gall wasps Greenstriped mapleworm Grasshoppers Hackberry nipplegall maker Holly bud moth Holly leafminer Jackpine budworm Japanese beetle Jeffrey pine needleminer June beetles Lace bugs Leafhoppers Leafrollers Locust borer	Maple leafcutter Mealy bugs Mimosa webworm Nantucket pine tip moth Oak leafminers Oak moth Oak skeletonizer Oakworm complex Oleander caterpillar Olive ash borer Orange-striped oakworm Periodical cicada Pine looper Pine sawfly Pine spittlebug Pitch pine tip moth Spruce budworm Plant bugs Poinsettia hornworm Psyllids Puss caterpillar Redhumped oakworm Rose aphid Rose chafer Rose slug Saddled prominent Sawflies (exposed) Scale insects (crawlers) Sowbugs Spiney elm caterpillar Springtails Spruce needleminer Subtropical pine tip moth Tent caterpillars Thorn bug Thrips (exposed) Ticks Walnut caterpillar Webworms Western hemlock looper Western spruce budworm Willow leaf beetles Wooly gall aphid Yellow poplar weevil	1	<p>Observe plant response precautions.</p> <p>Obtain thorough coverage of upper and lower leaf surfaces. The addition of a sticker may improve residual control.</p> <p>To control scale insects, treat trunks, stems and twigs in addition to plant foliage.</p> <p>For optimum worm control, treat when pests are small.</p> <p>Do not use on syrup-producing sugar maples where sap is harvested. Applications for control of maple leafcutter on sugar maple should be made when larvae are in 2nd instar after mining and as cases are being formed.</p> <p>Repeat treatments as necessary up to a total of 6 times per year but not more often than once every 7 days.</p> <p>For gypsy moth control, use the higher rate for heavy infestations.</p>
	Gypsy Moth		3/4 to 1	

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TREES AND ORNAMENTALS, CONTINUED

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
<p>Trees and Ornamentals: Roses, Flowers, Other Herbaceous Plants, Woody Plants, Shrubs in Commercial and Residential Areas and in Nursery Production Areas</p>	<p>Elm bark beetle Ips engraver beetles Mountain pine beetle Roundheaded pine beetle Spruce beetle Western pine beetle</p>	<p>2% solution (5 fluid ounces per gallon)</p>	<p>Direct Trunk Treatment: Effective as a preventative treatment only. Repeat annually as required to prevent beetle attacks. Apply 1 gallon of spray per 50 square feet of bark prior to beetle flight or host-tree attack. Treat tree trunk from ground level up, until trunk diameter is less than 5 inches. For elm bark beetle: apply approximately 20-30 gallons of spray mixture for each 50 feet of elm tree for thorough coverage of all bark surfaces on trunks, limbs and twigs. Do not make more than 2 applications per year or repeat applications more often than once every six months.</p>

RESTRICTIONS AND PRECAUTIONS: TREES AND ORNAMENTALS

- Do not make more than 6 foliar and 2 direct trunk treatments per year.
- To prepare small volumes of spray mixture, use 1/3 fl. oz. (approximately 2 teaspoons) of this product in an adequate amount of water and apply to 500 sq.ft. where rates of 1 quart per acre are indicated.
- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

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TURFGRASS

Apply the recommended rates using pressure-type equipment in sufficient spray volume for thorough coverage and thatch penetration.

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS	
Turfgrass: golf turf, sports fields, sod farms, domestic and commercial lawns, cemeteries, parks, campsites, recreational areas.	Ants Armyworm Centipedes Chiggers Cutworms Earwigs Essex skipper European chafer Fall armyworm Fiery skipper Grasshoppers Green June beetle larvae Leafhoppers	Lucerne moth Millipedes Mosquitoes (adults) Scarab beetle adults (May beetle, June beetle, Japanese beetle, green June beetle) Sowbugs Spittlebugs Springtails Ticks Yellowstriped armyworm	2 to 4 (1 1/2 to 3 fl.oz. per 1000 SQ.FT.)	For Armyworm, Cutworm, and Fall Armyworm Control: Do not irrigate treated areas within 24 hrs. following insecticide application. For Green June Beetle Grub (larvae) Control: Make applications when grubs are feeding near the soil surface. Water or irrigate turfgrass soon after treatment. Repeat applications as necessary up to a total of 4 times per year but not more often than once every 7 days.
	Chinch bugs Sod Webworm (lawn moths)		6 to 8 (4.4 to 6 fl.oz. per 1000 SQ.FT)	For Chinch bug Control: Treat entire grass area rather than just damaged areas. Irrigation prior to treatment will aid in penetration of insecticide into turfgrass. Do not irrigate treated areas within 24 hrs. following insecticide application.
	Bluegrass billbug larvae European crane fly Fleas White grubs (Japanese beetle, Chafer beetle, and <i>Phyllophaga</i> spp. larvae) Black turfgrass ataenius beetle larvae Hyperoides weevil (bluegrass weevil) larvae		8 (6 fl.oz. per 1000 SQ.FT.)	For European Crane Fly Control: Treatments should be applied in early spring, April 1 to April 15, or as recommended by local Agricultural Extension Service agents. Water or irrigate turfgrass soon after treatment. For White Grub Control: Applications should be made when grubs are feeding near the soil surface, usually during late March through May, or July through early September, or as recommended by local Agricultural Extension Service agents. Water or irrigate turfgrass soon after treatment. Repeat applications as necessary up to 2 times per year but not more often than once every 7 days.

RESTRICTIONS AND PRECAUTIONS: TURFGRASS

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

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CONTROL OF SPECIFIC PESTS ACROSS MULTIPLE SITES

GRASSHOPPERS

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
All crops on this label	Grasshoppers	1/2 to 1 1/2*	Apply 1/2 to 3/4 quarts per acre of this product for nymphs on small plants or sparse vegetation. Apply 1 to 1 1/2 quarts per acre for mature grasshoppers or applications to dense foliage or if extended residual control is desired. Be certain spray volumes are appropriate to assure adequate coverage.

RESTRICTIONS AND PRECAUTIONS: GRASSHOPPER CONTROL

- ***NOTE:** Refer to individual site listings elsewhere on this label for use limitations and restrictions. Do not use rates higher than listed for the site or exceed other use restrictions.

CONTROL OF TICKS WHICH VECTOR LYME DISEASE

For control of juvenile and adult ticks which vector Lyme Disease, apply the recommended amount in sufficient volume for thorough coverage.

CROP/SITE	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
All crops on this label Pastures Forested Areas Wasteland, Rights-of-Way, Hedgerows, Ditchbanks, Roadsides, Set-Aside and Conservation Reserve Program Acreage Trees and Ornamentals Turfgrass	<i>Ixodes</i> spp. (Deer tick, Bear tick, Black legged tick) <i>Amblyomma</i> spp. (Lone star tick)	1 to 2*	Use the high rate for heavy tick infestations.* Use higher spray volumes for dense ground cover or heavy leaf litter. Target applications for nymphal control in late spring or early summer. Control of adult tick can be obtained with late summer and fall applications. Do not use spot treatments. Treat entire area and perimeter areas where exposure to ticks may occur. Ticks may be reintroduced from surrounding areas on host animals. Retreat as necessary to maintain adequate control levels*.

RESTRICTIONS AND PRECAUTIONS: CONTROL OF TICKS WHICH VECTOR LYME DISEASE

- ***NOTE:** Refer to individual site listings elsewhere on this label for use limitations and restrictions. Do not use rates higher than listed for the site or exceed other use restrictions.
- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATION OR UNTIL SPRAYS HAVE DRIED.

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IMPORTED FIRE ANTS

CROP/SITE	PEST	QUARTS OF SEVIN® RP4 PER VOLUME OF WATER	SPECIFIC DIRECTIONS
Pastures Rangeland Forested Areas Trees and Ornamentals Turfgrass Wasteland	Imported fire ants	3/4 fluid ounce per gallon	DRENCH APPLICATION: 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 a bucket, can or other appropriate equipment. Thoroughly wet mound and surrounding areas to a 4 ft diameter (12 sq.ft.). Do not disturb mound prior to treatment. Pour solution from a height of about three feet to give sufficient force to break mound apex and flow into ant tunnels. For best results apply in cool weather (65-80°F) or in early morning or late evening hours. Repeat application if mound activity resumes after 7 days. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.
Nursery Stock, Vegetable Transplants*, Foliage Plants, Bedding Plants (Outdoor Use Only)	Imported fire ants	1 1/2 quarts per 100 gallons	Avoid contact with foliage and treat only the growing media when using on bedding plants. Do not make more than one application, either as a root dip or drench treatments (applied to the point of saturation).

RESTRICTIONS AND PRECAUTIONS: IMPORTED FIRE ANT CONTROL

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL DRENCH HAS DRIED.
- DO NOT USE IN GREENHOUSES.
- ***NOTE:** DO NOT USE ON ANY FOOD CROP NOT LISTED ON THIS LABEL. Refer to the specific crop section for additional restrictions and precautions.
- To prepare small amounts, use 3/4 fluid ounce (approximately 1 1/2 tablespoons) of SEVIN® BRAND RP4 per each gallon of mix where 1 1/2 quarts per 100 gallons are indicated.

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ADULT MOSQUITO CONTROL

Apply in sufficient gallonage for thorough coverage.

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Pastures Rangeland Forested Lands Trees and Ornamentals Turfgrass Wastelands	Mosquitoes (adults)	1/4 to 1*	OBSERVE BEE CAUTION. Treat shrubbery and areas where adult mosquitoes congregate. Treat when adult mosquitoes are active in early mornings or late evenings. Repeat applications as necessary*. Use 1/4 to 1/2 quart per 100 gallons in mistblowers, 1/2 to 1 quart per acre in aerial sprays, and 1 quart per acre in low pressure ground sprayers.

RESTRICTIONS AND PRECAUTIONS: ADULT MOSQUITO CONTROL.

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATION OR UNTIL SPRAYS HAVE DRIED.
- CAUTION: May kill shrimp and crabs. Do not use in areas where these are important resources.
- *NOTE: Refer to individual site listings elsewhere on this label for use limitations and restrictions. Do not use rates higher than listed for the site or exceed other use restrictions.
- To prepare small volumes of spray mixture, use 1/3 fl. oz. (approximately 2 teaspoons) of this product in an adequate amount of water and apply to 500 sq.ft. where rates of 1 quart per acre are indicated.

NUISANCE PEST CONTROL

For use as a perimeter treatment to prevent infestations of buildings, apply the specified dosage in a band 6 to 10 feet wide around the outside perimeter of the structure.

PEST	RATE OF SEVIN® RP4	SPECIFIC DIRECTIONS
Ants Bees Brown dog tick Centipedes Cockroaches Crickets Darkling beetle (lesser mealworm or litter beetle) Earwigs Firebrats Fleas Millipedes Scorpions Silverfish Spiders Wasps	1% solution or 2 1/2 fluid ounces per gallon	Observe plant response precautions. Apply as a coarse wet spray in a band 6 to 10 feet wide around the outside perimeter of buildings. Confine applications to areas immediately adjacent to the building. Direct application to the structure should be minimal and restricted to cracks, crevices, and areas where insects tend to congregate. For use in and around flower beds and ornamental plantings, apply as a coarse wet spray in and around plant beds. May be applied to outdoor sleeping quarters of pets. Do not treat animals. Do not allow animals to use treated area until sprays have dried.

RESTRICTIONS AND PRECAUTIONS: NUISANCE PEST CONTROL

- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.
- NOTE: Staining may occur on certain surfaces such as stucco, brick, cinder block, wood, fabrics, and carpet. Spray deposits on painted or stained surfaces of finishes (eg., cars, house trailers, boats, etc.) should be removed immediately by washing to prevent discoloration. Avoid application to surfaces where visible spray residues are objectionable. Staining of fabrics and carpet may be permanent.

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IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

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