



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

April 22, 2003

Liane Stocky
Aventis Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645

Subject: Revised Labeling per PR Notice 2001-1
SEVIN SL Carbaryl Insecticide
EPA Reg. No. 432-1227
Submission date: September 17, 2002


Dear Ms. Stocky,

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 changes before you release the product for shipment bearing the amended labeling:

1. Under Storage and Disposal directions, move the prohibition statement "Do not contaminate water, food or feed br storage or disposal" to directly under the Storage and Disposal heading.
2. Revise the precautionary statements as follows: "Harmful if swallowed, absorbed through the skin or in eyes. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse."
3. Under directions for use for Control of Ticks Which Vector Lyme Disease, either delete reference to *Amblyomma* spp. (Lone star tick), or submit data supporting this label claim.

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 questions, please contact me at (703) 305-6736 or electronically at edwards.joanne@epa.gov.

Sincerely,



Joanne S. Edwards, Entomologist
Insecticide-Rodenticide Branch
Registration Division (7505C)

SEVIN® SL

Carbaryl Insecticide

FOR AGRICULTURAL OR COMMERCIAL USE ONLY

ACTIVE INGREDIENT:

Carbaryl (1-naphthyl N-methylcarbamate)

INERT INGREDIENTS:

(Contains 4 Pounds Carbaryl Per Gallon)

EPA Reg. No. 432-1227

**ACCEPTED
with COMMENTS
In EPA Letter Dated**

April 22, 2003

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

432-1227

43.0% by wt.

57.0% by wt.

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 1-800-334-9745

FIRST AID

Carbaryl is an N-Methyl Carbamate Insecticide.

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • 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 eye. • Call a poison control center or doctor for treatment advice.
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.
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.

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

GENERAL

Contact a physician immediately in all cases of suspected poisoning. Transport to a physician or hospital immediately and SHOW A COPY OF THIS LABEL TO THE PHYSICIAN. If poisoning is suspected in animals, contact a veterinarian.

ANTIDOTE STATEMENT

ATROPINE SULFATE IS HIGHLY EFFECTIVE AS AN ANTIDOTE. Narcotics and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are NOT recommended. See NOTE TO PHYSICIAN.

NOTE TO PHYSICIAN

Treat symptomatically. Overexposure to materials other than this product may have occurred.

Carbaryl is an N-methyl carbamate insecticide, which is a cholinesterase inhibitor. Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible. Gastric lavage may be used if this product has been swallowed. Carbaryl poisoning may occur rapidly after ingestion and prompt removal of stomach contents is indicated.

Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent over atropinization. Improve tissue oxygenation as much as possible before administering atropine to minimize the risk of ventricular fibrillation. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30

to 60 minutes as needed to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours.

Narcotics and other sedatives should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are NOT recommended.

To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analysis will be arranged by Aventis Environmental Science USA LP.

Consultation on therapy can be obtained at all hours by calling the Aventis Environmental Science emergency number 1-800-334-7577.

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.

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 Aventis Environmental Science 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.

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.

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® SL 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, and spotted tentiform leafminer 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® SL 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® SL 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® SL 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® SL 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 that 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.

SPECIFIC USE DIRECTIONS CROP/SITE GROUPINGS:

Trees and Ornamentals

Turfgrass

Brassica Leafy Vegetable Crops

Fruiting Vegetables

Leafy Vegetables

Pasture and Grasses Grown for Seed

Rangeland

Forested Areas and Rangeland Trees

Noncropland

Control of Specific Pests across Multiple Sites

Imported Fire Ants

Ticks which Vector Lyme Disease

Adult Mosquito Control

Nuisance Pest Control Around Building Perimeters

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

Tree Nut Crops (Pistachios; Tree Nuts)

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.

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® SL PER ACRE OR PER 100 GALLONS	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 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 Eriophyid mites European pine shoot moth Fall armyworm Flea beetle Fuchsia gall mite Fuller rose beetle Gall midges Gall wasps Glassy winged sharpshooter 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 spruce budworm Willow leaf beetles Woolly gall aphid Yellow poplar weevil	1 (3/4 fluid oz per 1000 ft ²)
	Gypsy Moth	3/4 to 1 (1/2 to 3/4 fluid oz per 1000 ft ²)	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.

TREES AND ORNAMENTALS, CONTINUED

CROP	PEST	QUARTS OF SEVIN® SL PER ACRE	SPECIFIC DIRECTIONS
Trees and Ornamentals: Roses, Flowers, Other Herbaceous Plants, Woody Plants, and Shrubs	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: TREES AND ORNAMENTALS

- Do not make more than 6 foliar and 2 direct 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.
- Avoid direct application to lakes, streams and ponds.
- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

TURFGRASS

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

CROP	PEST	QUARTS OF SEVIN® SL PER ACRE	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	2 to 4 (1 1/2 to 3 fl. oz per 1000 ft ²)	For Armyworm, Cutworm, and Fall Armyworm Control: Do not irrigate treated areas for 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 1/2 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 (such as Japanese beetle, Chafer beetle, and <i>Phyllophaga</i> spp. larvae) Black turfgrass ataenius beetle larvae Hyperoides weevil (annual bluegrass weevil) larvae	8 (6 fl. oz. Per 1000 sq. ft ² .)	<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>
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RESTRICTIONS AND PRECAUTIONS: TURFGRASS

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

BRASSICA LEAFY VEGETABLES CROPS

CROP	PEST	QUARTS OF SEVIN® SL PER ACRE	SPECIFIC DIRECTIONS												
Broccoli Brussel Sprouts Cauliflower	Flea beetles Harlequin bug Leafhoppers	1/2 to 1 (3/8 to 3/4 fl. oz per 1000 ft ²)	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	<table border="0"> <tr> <td>Armyworm</td> <td>Lygus bugs</td> </tr> <tr> <td>Aster leafhopper</td> <td>Spittle bugs</td> </tr> <tr> <td>Corn earworm</td> <td>Stink bugs</td> </tr> <tr> <td>Diamondback moth</td> <td>Tarnished plant bug</td> </tr> <tr> <td>Fall armyworm</td> <td></td> </tr> <tr> <td>Imported cabbageworm</td> <td></td> </tr> </table>	Armyworm	Lygus bugs	Aster leafhopper	Spittle bugs	Corn earworm	Stink bugs	Diamondback moth	Tarnished plant bug	Fall armyworm		Imported cabbageworm		1 to 2 (3/4 to 1 1/2 fl. oz per 1000 ft ²)	
Armyworm	Lygus bugs														
Aster leafhopper	Spittle bugs														
Corn earworm	Stink bugs														
Diamondback moth	Tarnished plant bug														
Fall armyworm															
Imported cabbageworm															

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. or 6 quarts per acre per crop.

FRUITING VEGETABLES

CROP	PEST	QUARTS OF SEVIN® SL 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 1 to 2 (3/4 to 1 1/2 fl. oz per 1000 ft 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.
	Flea beetles Leafhoppers	1/2 to 1 (3/8 to 3/4 fl. oz per 1000 ft ²)	
	Cutworms	2 (1 1/2 fl. oz per 1000 ft ²)	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

RESTRICTIONS AND PRECAUTIONS: FRUITING VEGETABLES

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 8 quarts per acre or 6fl. oz. per 1000 ft² per crop.

LEAFY VEGETABLES

CROP	PEST	QUARTS OF SEVIN® SL 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 1.0 (3/8 to 3/4 fl. oz per 1000 ft ²)	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 1 to 2 (3/4 to 1 1/2 fl. oz per 1000 ft ²)	

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 or 4 1/2 fl. oz per 1000 ft² per crop.

PASTURE AND GRASSES GROWN FOR SEED

CROP	PEST	QUARTS OF SEVIN® SL 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 (3/4 to 1 fl. oz per 1000 ft 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.

RANGELAND

CROP	PEST	QUARTS OF SEVIN® SL 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 (3/4 fl. oz per 1000 ft ²)	

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.

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® SL 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 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 Eriophyid mites European pine shoot moth Fall armyworm Flea beetle Fuschia 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 spruce budworm Willow leaf beetles Wooly gall aphid Yellow poplar weevil	1 (3/4 fl. oz per 1000 ft ²)	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 (1/2 to 3/4 fl. oz per 1000 ft ²)	

FORESTED AREAS AND RANGELAND TREES, CONTINUED

CROP	PEST	QUARTS OF SEVIN® SL 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.

NON CROPLAND

CROP	PEST	QUARTS OF SEVIN® SL PER ACRE	SPECIFIC DIRECTIONS
Conservation Reserve Program Acreage	Black grass bug	1/4 to 1/2 (3/16 to 3/8 fl. oz per 1000 ft ²)	Up to 2 applications per year may be made but not more often than once every 14 days.
Set-Aside Program Acreage Wasteland	Mormon cricket Range caterpillar Range crane fly	1/2 to 1 (3/8 to 3/4 fl. oz per 1000 ft ²)	Carefully mark swaths to avoid over-application.
Rights-of-Way Hedgerows Ditchbanks Roadsides	Ticks	1 to 1 1/2 (3/4 to 1 fl. oz per 1000 ft 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

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® SL PER ACRE	SPECIFIC DIRECTIONS
Citrus Fruits	Avocado leafroller Orange Tortrix California orangedog Western tussock moth Citrus cutworm Fruittree leafroller	2 to 3 (1 1/2 to 2 1/4 fl. oz. per 1000 ft ²)	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 [such as Black scale, brown soft scale, California red scale (except in California), citrus snow scale, yellow scale (except in California)]	3 to 5 (2 1/4 to 3 3/4 fl. oz. per 1000 ft ²)	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 (adults) Little leaf notcher (adult)	5 to 7 1/2 (3 3/4 to 5 5/8 fl. oz. per 1000 ft ²)	
	California Only California red scale Yellow scale	5 to 16 (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

- Do not apply within 5 days of harvest.
- Do not apply more than a total of 20 quarts per acre or 15 fluid ounces per 1000 sq.ft. per crop.

OLIVES

CROP	PEST	QUARTS OF SEVIN® SL PER ACRE	SPECIFIC DIRECTIONS
Olives	Scale insects (such as olive scale, black scale)	5 to 7 1/2 (3 3/4 to 4 5/8 fl. oz. per 1000 ft 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 or 11 1/4 fl. oz. per 1000 sq. ft. per crop.

POME FRUITS

CROP	PEST	QUARTS OF SEVIN® SL PER ACRE	SPECIFIC DIRECTIONS
Pome Fruits: Apples, Pears, Loquats,	White apple leafhopper	1/2 to 1 1/2 (3/8 to 1 1/8 fl. oz. per 1000 ft 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.
Crabapples, Oriental Pears	Apple aphid Codling moth	1 to 3 (3/4 to 2 1/4 fl. oz. per 1000 ft ²)	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.
	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 Scale insects sawfly (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 1/2 to 3 (1/8 to 2 1/4 fl. oz. per 1000 ft ²)	For psylla control, apply when eggs hatch or young nymphs are present. For scale control, apply when crawlers are present.

**POME FRUITS
(continued)**

CROP	PEST	QUARTS OF SEVIN® RP4 PER ACRE	SPECIFIC DIRECTIONS
Apples Only, for Fruit Thinning		1 to 3 (3/4 to 2 1/4 fl. oz. per 1000 ft ²)	<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 20mm 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 or 11 1/4 fl. oz. per 1000 sq. ft. per crop
- Do not make more than a total of 8 applications per crop.

FOR PROTECTION OF HONEY BEES:

- Remove all beehives 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.

STONE FRUITS

CROP	PEST	QUARTS OF SEVIN® SL 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 (1 1/2 to 2 1/4 fl. oz. per 1000 ft ²)	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 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	3 to 4 (2 1/4 to 3 1/4 fl. oz. per 1000 ft ²)	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 (3 to 5 3/4 fl. oz. Per 1000 ft ²)	For dormant or delayed dormant timing, apply in combination with 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 or 10 1/2 fluid ounces per 1000 sq. ft. per crop.
- Do not apply more than a total of 5 quarts per acre or 3 3/4 fluid ounces per 1000 sq. ft. at the dormant or delayed dormant timing.
- Do not apply more than a total of 9 quarts per acre or 6 3/4 fluid ounces per 1000 sq. ft. during the production season.

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® SL PER ACRE	SPECIFIC DIRECTIONS
Pistachios	Brown soft scale Lecanium scale Navel orangeworm	3 to 5 (2 1/4 to 3 3/4 fl. oz. per 1000 ft ²)	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 (3 to 3 3/4 fl. oz. per 1000 ft ²)	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 or 11 1/4 fluid ounces per 1000 sq. ft. per crop, including any application at the dormant or delayed dormant timing.

TREE NUTS

CROP	PEST	QUARTS OF SEVIN® SL PER ACRE	SPECIFIC DIRECTIONS
Tree Nuts: Almonds, Chestnuts, Filberts, Pecans, Walnuts	Black margined aphid Calico scale Codling moth European fruit lecanium Fall webworm 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 (1 1/2 to 3 3/4 fl. oz. per 1000 SQ.FT.)	OBSERVE BEE CAUTION 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. Use lower rates for pests attacking leaves. Use higher rates for pests attacking fruit and for higher infestations. For scale control, apply when crawlers are present. 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. For navel orangeworm in almonds and walnuts, best results have been found by timing early and midseason applications to correspond with moth flight peaks. 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. 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.
	Chestnut weevil European earwig	4 to 5 (3 to 3 3/4 fl. oz. per 1000 SQ.FT.)	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. For European earwig, thorough coverage of trunks, branches, and nuts is needed for best results.
Almonds only	Peach twig borer Scale insects	4 to 5 (3 to 3 3/4 fl. oz. per 1000 SQ.FT.)	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: TREE NUTS

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 15 quarts per acre or 11 1/4 fluid ounces per 1000 sq. ft. per crop, including any application at the dormant or delayed dormant timing.

CONTROL OF SPECIFIC PESTS ACROSS MULTIPLE SITES

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® SL PER ACRE	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)	1 to 2* (3/4 to 1 1/2 fl. oz. per 1000 ft 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.

IMPORTED FIRE ANTS

CROP/SITE	PEST	QUARTS OF SEVIN® SL PER ACRE	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® SL Carbaryl Insecticide per each gallon of mix where 1 1/2 quarts per 100 gallons are indicated.

ADULT MOSQUITO CONTROL

Apply in sufficient gallonge for thorough coverage.

CROP/SITE	PEST	QUARTS OF SEVIN® SL PER ACRE	SPECIFIC DIRECTIONS
All crops/sites on this label	Mosquitoes (adults)	1/4 to 1* (3/16 to 3/4 fl. oz per 1000 ft ²)	<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>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.</p>

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 or 3/4 fluid ounces per 1000 SQ.FT. 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® SL	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	<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: 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 (e.g. 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.

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 AVENTIS Environmental Science USA, LP. All such risks shall be assumed by the user or buyer.

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