



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 80 WSP Carbaryl Insecticide
EPA Reg. No. 432-1226
Submission date: September 17, 2002

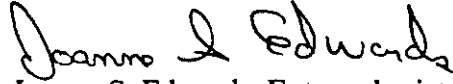
Dear Ms. Stocky,

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: "May be fatal if swallowed. Harmful if absorbed through the skin, or inhaled, or in eyes. Do not breathe vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash 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,

A handwritten signature in black ink that reads "Joanne S. Edwards". The signature is written in a cursive style with a large initial "J" and "S".

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

SEVIN® 80WSP

Carbaryl Insecticide

FOR AGRICULTURAL OR COMMERCIAL USE ONLY

ACTIVE INGREDIENT:

Carbaryl (1-naphthyl N-methylcarbamate)

INERT INGREDIENTS:

E.P.A. Reg. No. 432-1226

**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.*

432-1226

..... 80% by wt.
..... 20% by wt.

E.P.A. Est. No.

KEEP OUT OF REACH OF CHILDREN WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

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 of 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 overatropinization. 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.

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)

WARNING

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

Do not breathe vapors, dust or spray mist. Do not get in eyes, on skin or on 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 and 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. Discharge from rice fields may kill aquatic and estuarine invertebrates. 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 USA LP 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.

This Supplemental Label must be in possession of the user at the time of pesticide application.

Strictly observe label directions and cautions. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about 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 coveralls, 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 SEVIN® 80WSP Carbaryl Insecticide 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.

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

Do not reuse outer bag. Dispose of outer bag in the trash, or, if allowed by State and local authorities, by burning. If outer bag is burned, stay out of smoke.

GENERAL CAUTIONS AND RESTRICTIONS

SEVIN® 80WSP Carbaryl Insecticide is a dry powder formulation of SEVIN® brand carbaryl insecticide and is packaged in water soluble paks. Each pak contains 1.25 lbs of formulated product. Do not sell individual water-soluble paks. Do not handle inner bag with wet hands or gloves. Do not allow paks to become wet prior to adding to the spray tank. Handle outer container (over wrap bag) carefully to avoid breakage of inner soluble paks. Always reseal outer (over wrap bag) in a manner that protects remaining paks from moisture. Do not remove the WSPs from the container except for immediate use. Use the entire contents of a WSP. Do not break open to use partial contents of a WSP.

This product readily disperses in water to form a spray which may be applied by air or ground equipment.

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.

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.

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, and wood. 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.

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 and Southern green stink bug to carbaryl. If local experience indicates inadequate control, use an alternative pesticide.

MIXING, LOADING AND HANDLING INSTRUCTIONS

Remove oil, rust, scale, pesticide residues and other foreign matter from mix tanks and entire spray system. Flush with clean water. Consult the Specific Use Directions section of this label to determine the number of paks and spray volume required. Fill the mixing tank partially (1/2 to 3/4 full) with water. With the agitator on, slowly add the required number of unopened paks of SEVIN 80WSP Carbaryl Insecticide into the mixing tank. Allow all the water-soluble paks to dissolve and completely disperse. Depending upon the water temperature and the degree of agitation, the water-soluble paks should be completely dissolved within 3-5 minutes. Continue agitation while adding the remainder of the water. Do not put water-soluble paks close the recirculation inlet and outlet; as they may block the line before completely dissolved. Prepare only as much spray mixture as can be applied on the day of mixing. Do not use partial water-soluble paks. 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.

TANK MIXING INSTRUCTIONS

Once the water soluble paks have completely dissolved, add other products in the following order: wettable powder, dry flowable (wetable granules), liquid flowable, liquids, and EC's. Always allow each tank mix partner to disperse fully before adding the next product.

COMPATIBILITY INFORMATION

SEVIN® 80WSP 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® 80WSP 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. Use of 50 mesh slotted strainers in spray system and 25 mesh slotted strainers behind nozzles is recommended.

GROUND APPLICATION

Apply in sufficient volume for adequate coverage on all crops and sites.

AERIAL APPLICATION

For adequate distribution, use at least 10 gallons of spray mixture per acre for application to tree and orchard crops or at least 2 gallons of spray mixture per acre for application to other crops.

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.

SPRAY PREPARATION: First prepare a suspension of SEVIN® 80WSP Carbaryl Insecticide in a mix tank. Fill tank with 1/2 to 3/4 the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of SEVIN® 80WSP, and then the remaining volume of water. (Suspension concentrations using the appropriate dosage per acre recommended on this label of SEVIN® 80WSP, per 1 to 4 gallons of water are recommended). Then set sprinkler to deliver 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of SEVIN® 80WSP into the irrigation water line so as to deliver the desired rate per acre. The suspension of SEVIN® 80WSP should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. If you should have any other questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

NOTE: When treatment with SEVIN® 80WSP Carbaryl Insecticide has been completed, further field irrigation over the treated area should be avoided for 24 to 48 hours to prevent washing the chemical off the crop.

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.

SPECIFIC USE DIRECTIONS

CROP/SITE GROUPINGS:

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

Tree Nut Crops (Pistachios; Tree Nuts)

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

 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.

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	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS	
Citrus Fruits	Avocado leafroller California orangedog Citrus cutworm Fruittree leafroller	Orange Tortrix Western tussock moth	2 1/2 to 3 3/4	0.5 to 0.3	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 Eriophyid mites Plant bugs	Scale insects [Black scale, brown soft scale, California red scale (except in California), citrus snow scale, yellow scale (except in California)]	3 3/4 to 6 1/4	0.3 to 0.2	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) Citrus root weevils (adults)	Fuller Rose Beetle Little leaf notcher (adult)	6 1/4 to 9 3/8	0.2 to 0.13	
	California only: California red scale	Yellow scale	6 1/4 to 20	0.2 to 0.05	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 25 pounds per acre per crop.

OLIVES

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Olives	Scale insects (olive scale, black scale)	6 1/4 to 9 3/8	0.2 to 0.13	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 18 3/4 pounds per acre per crop.

POME FRUITS

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Pome Fruits: apples, pears, loquats, crabapples, oriental pears	White apple leafhopper	5/8 to 1 7/8	1.8 to 0.67	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 1/4 to 3 3/4	1.0 to 0.3	
	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, San Jose scale) Fruittree leafroller Tarnished plant bug Gypsy moth Tentiform leafminers Japanese beetle Woolly apple aphid Lesser appleworm Yellowheaded Lygus bugs fireworm Orange tortrix	1 7/8 to 3 3/4	0.67 to 0.3	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.

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 18 3/4 pounds 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.

STONE FRUITS

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS																																		
Stone Fruits: Apricots, Cherries, Nectarines, Peaches, Plums, and Prunes	<table border="0"> <tr> <td>Apple pandemis</td> <td>Orange tortrix</td> </tr> <tr> <td>Black cherry aphid</td> <td>Oriental fruit moth</td> </tr> <tr> <td>Cherry fruitworm</td> <td>Peach twig borer</td> </tr> <tr> <td>Cherry maggot</td> <td>Periodical cicada</td> </tr> <tr> <td>(Cherry fruit fly)</td> <td>Plum curculio</td> </tr> <tr> <td>Codling moth</td> <td>Prune leafhopper</td> </tr> <tr> <td>Cucumber beetles</td> <td>Redbanded leafroller</td> </tr> <tr> <td>Eastern tent caterpillar</td> <td>Rose chafer</td> </tr> <tr> <td>Eyespotted bud moth</td> <td>Scale insects (Brown</td> </tr> <tr> <td>European earwig</td> <td>soft scale, Forbes</td> </tr> <tr> <td>Fruittree leafroller</td> <td>scale, Lecanium</td> </tr> <tr> <td>Green fruitworm</td> <td>scale, Olive scale,</td> </tr> <tr> <td>Gypsy moth</td> <td>Oystershell scale,</td> </tr> <tr> <td>Japanese beetle</td> <td>San Jose scale)</td> </tr> <tr> <td>June beetle</td> <td>Tarnished plant bug</td> </tr> <tr> <td>Lesser peachtree borer</td> <td>Tussock moth</td> </tr> <tr> <td>Mealy plum aphid</td> <td>Variiegated leafroller</td> </tr> </table>	Apple pandemis	Orange tortrix	Black cherry aphid	Oriental fruit moth	Cherry fruitworm	Peach twig borer	Cherry maggot	Periodical cicada	(Cherry fruit fly)	Plum curculio	Codling moth	Prune leafhopper	Cucumber beetles	Redbanded leafroller	Eastern tent caterpillar	Rose chafer	Eyespotted bud moth	Scale insects (Brown	European earwig	soft scale, Forbes	Fruittree leafroller	scale, Lecanium	Green fruitworm	scale, Olive scale,	Gypsy moth	Oystershell scale,	Japanese beetle	San Jose scale)	June beetle	Tarnished plant bug	Lesser peachtree borer	Tussock moth	Mealy plum aphid	Variiegated leafroller	2 1/2 to 3 3/4	0.5 to 0.3	<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>
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	<p style="text-align: center;">California Only:</p> <table border="0"> <tr> <td>Black cherry aphid</td> <td>Oriental fruit moth</td> </tr> <tr> <td>Cherry fruitworm</td> <td>Peach twig borer</td> </tr> <tr> <td>Cherry maggot</td> <td>Scale insects (Brown</td> </tr> <tr> <td>(Cherry fruit fly)</td> <td>soft scale, Forbes</td> </tr> <tr> <td>Codling moth</td> <td>scale, Lecanium</td> </tr> <tr> <td>Cucumber beetles</td> <td>scale, Olive scale,</td> </tr> <tr> <td>Eyespotted bud moth</td> <td>Oystershell scale,</td> </tr> <tr> <td>European earwig</td> <td>San Jose scale)</td> </tr> <tr> <td>Fruittree leafroller</td> <td>Tarnished plant bug</td> </tr> <tr> <td>Green fruitworm</td> <td>Tussock moth</td> </tr> <tr> <td>Mealy plum aphid</td> <td></td> </tr> <tr> <td>Orange tortrix</td> <td></td> </tr> </table>	Black cherry aphid	Oriental fruit moth	Cherry fruitworm	Peach twig borer	Cherry maggot	Scale insects (Brown	(Cherry fruit fly)	soft scale, Forbes	Codling moth	scale, Lecanium	Cucumber beetles	scale, Olive scale,	Eyespotted bud moth	Oystershell scale,	European earwig	San Jose scale)	Fruittree leafroller	Tarnished plant bug	Green fruitworm	Tussock moth	Mealy plum aphid		Orange tortrix		3 3/4 to 5	0.3 to 0.25	<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 14 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>										
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RESTRICTIONS AND PRECAUTIONS: STONE FRUITS

- 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 17 1/2 pounds per acre per crop.
- Do not apply more than a total of 6 1/4 pounds per acre at the dormant or delayed dormant timing.
- Do not apply more than a total of 11 1/4 pounds per acre 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	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Pistachios	Brown soft scale Lecanium scale Navel orangeworm	3 3/4 to 6 1/4	0.3 to 0.2	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	5 to 6 1/4	0.25 to 0.2	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 18 3/4 pounds per acre per crop, including any application at the dormant or delayed dormant timing.

TREE NUTS

12/23

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED PER PAK SEVIN® 80WSP	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 1/2 to 6 1/4	0.5 to 0.2	<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	5 to 6 1/4	0.25 to 0.2	<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	5 to 6 1/4	0.25 to 0.2	<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 18 3/4 pounds per acre per crop, including any application at the dormant or delayed dormant timing.

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	POUNDS OF SEVIN® 80WSP PER ACRE OR 100 GALLONS	ACRES TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS	
Trees, 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 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 Glassy winged sharpshooter 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 1/4	1.0	<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	9/10 to 1 1/4	1.4 to 1.0		

TREES AND ORNAMENTALS, CONTINUED

14/23

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
<p>Trees, 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 (1 pak per 6.67 gallons)</p>	<p>See Specific Directions</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 a total of 6 foliar and 2 direct trunk treatments per year.
- 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	POUNDS OF SEVIN® 80WSP PER ACRE	SQ. FT. TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS	
Turfgrass: golf turf, sports fields, sod farms, domestic 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 1/2 to 5	11,000 to 22,000	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)		7 1/2 to 10	5,000 to 7,000	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		10	5,000	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.

BRASSICA LEAFY VEGETABLES CROPS

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Broccoli Brussel Sprouts Cauliflower	Flea beetles Harlequin bug Leafhoppers	2/3 to 1 1/4	1.8 to 1.0	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 1/4 to 2 1/2	1.0 to 0.5	

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 7 1/2 pounds per acre per crop.

FRUITING VEGETABLES

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	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 1/4 to 2 1/2	1.0 to 0.5	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	2/3 to 1 1/4	1.8 to 1.0	
	Cutworms	2 1/2	0.5	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 10 pounds per crop.

LEAFY VEGETABLES

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Leafy vegetables: Celery, Dandelion, Endive, Lettuce (head and leaf), Parsley, Spinach, Swiss Chard	Flea beetles Harlequin bug Leafhoppers	2/3 to 1 1/4	1.8 to 1.0	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 1/4 to 2 1/2	1.0 to 0.5	

RESTRICTIONS AND PRECAUTIONS: LEAFY VEGETABLES

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 7 1/2 pounds per acre per crop.

PASTURE AND GRASSES GROWN FOR SEED

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	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 1/4 to 1 7/8	1.0 to 0.67	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 3/4 pounds per acre per year.

RANGELAND

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Rangeland	Black grass bug Grasshoppers Mormon cricket Range caterpillar Range crane fly	2/3 to 1 1/4	1.8 to 1.0	Do not make more than 1 application per year. Carefully mark swaths to avoid over-application.
	Ticks	1 1/4	1.0	

RESTRICTIONS AND PRECAUTIONS: RANGELAND

- May be harvested or grazed the same day as treatment.
- Do not apply more than 1 1/4 pounds 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	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	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 1/4	1.0	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	9/10 to 1 1/4	1.3 to 1.0		

FORESTED AREAS AND RANGELAND TREES, CONTINUED

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	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 (1 pak per 6.67 gallons)	See Specific Directions	<p>Direct Trunk Treatment: Effective as a preventative treatment only. Repeat annually as required to prevent beetle attacks.</p> <p>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.</p> <p>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.</p> <p>Do not make more than 2 applications per year or repeat applications more often than once every six months.</p>

RESTRICTIONS AND PRECAUTIONS: FORESTED AREAS AND RANGELAND TREES

- Do not make more than 2 applications per year.
- DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

NON CROPLAND

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Conservation Reserve Program Acreage	Black grass bug	1/3 to 2/3	3.7 to 1.8	Up to 2 applications per year may be made but not more often than once every 14 days.
Set-Aside Program Acreage Wasteland Rights-of-Way Hedgerows Ditchbanks Roadsides	Mormon cricket Range caterpillar Range crane fly	2/3 to 1 1/4	1.8 to 1.0	Carefully mark swaths to avoid over-application.
	Ticks	1 1/4 to 1 7/8	1.0 to 0.67	

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 3/4 pounds per acre per year.

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	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED PER PAK SEVIN® 80WSP	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 Ornementals Turfgrass	<i>Ixodes</i> spp. (Deer tick, Bear tick, Black legged tick) <i>Amblyomma</i> spp. (Lone star tick)	1 1/4 to 2 1/2*	1.0 to 0.5	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	POUNDS OF SEVIN® 80WSP PER VOLUME OF WATER	AREA TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Pastures Rangeland Forested Areas Trees and Ornamentals Turfgrass Wasteland	Imported fire ants	1 pak per 67.6 gallons	See Specific Directions	<p>DRENCH APPLICATION:</p> <p>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.</p>
Nursery Stock, Vegetable Transplants*, Foliage Plants, Bedding Plants (Outdoor Use Only))	Imported fire ants	1 pak per 67.6 gallons	See Specific Directions	<p>Avoid contact with foliage and treat only the growing media when using on bedding plants.</p> <p>Do not make more than one application, either as a root dip or drench treatments (applied to the point of saturation).</p>

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.

ADULT MOSQUITO CONTROL

Apply in sufficient gallonage for thorough coverage.

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED PER PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Pastures Rangeland Forested Lands Trees and Ornamentals Turfgrass Wastelands	Mosquitoes (adults)	1/3 to 1 1/4*	1.0	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 1/3 to 2/3 pounds per 100 gallons in mistblowers, 2/3 to 1 1/4 pounds per acre in aerial sprays, and 1 1/4 pounds 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.

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® 80WSP	GALLONS PER PAK SEVIN® 80WSP	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	2% solution	13.3 gallons per pak	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 (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 of AVENTIS Environmental Science USA, LP. All such risks shall be assumed by the user or buyer.

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