264-526

09/23/2004



## 

WASHINGTON, D.C. 20460

SFP 2 3 2004

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Danielle A. Larocchelle Registration Manager Bayer CropScience 2 T.W. Alexander Drive Research Triangle Park, NC 27709

Subject: Label Amendment: Use deletion of poulty, First Aid and Precautionary Statements. Sevin brand 80WSP Carbaryl Insecticide . EPA Reg. No. 264-526 Submission dated November 3, 2003

Dear Ms. Larochelle:

The labeling referred to above submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable with the following comments:

1) Move the statement of "Do not contaminate water, food or feed by storage or disposal" from the Pesticide Disposal to under the main heading of Storage and Disposal.

A stamped copy "accepted with comments" of the label is enclosed for your records.

Please submit two (2) copies of the final printed label for our records before releasing the product to market. If you have any questions please call me at (703) 308-8328.

Sincerely yours,

Akiva Abramovitch, Ph.D. Chemist Insecticide-Rodenticide Branch Registration Division (7505C)

# SEVIN<sup>®</sup> brand 80WSP Carbaryl Insecticide

FOR AGRICULTURAL OR COMMERCIAL USE ONLY

ACTIVE INGREDIENT:

E.P.A. Reg. No. 264-526

#### ...... 20% by wt. E.P.A. Est. No.

ACCEPTED

with COMMENTS In EPA Letter Dated:

## 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 1-866-99BAYER (1-866-992-2937)

## FIRST AID

Carbaryl is an N-Methyl Carbamate Insecticide.

arbaryl is an N-M	ethyl Carbamate Insecticide.	SEP 2 3 2004
IF SWALLOWED:	<ul> <li>Immediately call a poison control center or doctor for treatment advice.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doc</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	Hadan at D. I. I. I.
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rin</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	sing eye.
IF ON SKIN OR CLOTHING:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial resp mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	iration, preferably mouth-to-
Have the prod	For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577. uct container or label with you when calling a polson control center or doctor o	r 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 Bayer CropScience.

Consultation on therapy can be obtained at all hours by calling the Bayer CropScience 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 chemicalresistant 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 estaurine 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 Bayer CropScience representative for further information.

## **DIRECTIONS FOR USE**

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

Strictly observe label directions and cautions. Do not 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 restrictedentry 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<sup>®</sup> brand 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<sup>®</sup> brand 80WSP Carbaryl Insecticide is a dry powder formulation of SEVIN<sup>®</sup> 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) with water. With the agitator on, slowly add the required number of unopened paks of SEVIN<sup>®</sup> brand 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 to the recirculating 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 (wettable granules), liquid flowable, liquids, and EC's. Always allow each tank mix partner to disperse fully before adding the next product.

#### **COMPATIBILITY INFORMATION**

SEVIN<sup>®</sup> brand 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<sup>®</sup> BRAND 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 for 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<sup>®</sup> brand 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<sup>®</sup> brand 80WSP, and then

the remaining volume of water. (Suspension concentrations using the appropriate dosage per acre recommended on this label of SEVIN<sup>®</sup> brand 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<sup>®</sup> brand 80WSP into the irrigation water line so as to deliver the desired rate per acre. The suspension of SEVIN<sup>®</sup> brand 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<sup>®</sup> brand 80WSP 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:** 

Asparagus

Brassica Leafy Vegetable Crops

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

Cucurbit Vegetables

Flax

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

Fruiting Vegetables

Leafy Vegetables

Legume Vegetables

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

Okra

Peanuts

Prickly Pear Cactus

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

Small Fruits and Berries

Sunflower

Tobacco

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

Tree Nut Crops (Pistachios; Tree Nuts)

Forested Areas and Rangeland Trees

#### Trees and Ornamentals

Turfgrass

Control of Specific Pests Across Multiple Sites

Grasshoppers Ticks which Vector Lyme Disease Imported Fire Ants Adult Mosquito Control

Nuisance Pest Control

## INSECT CONTROL

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

## ASPARAGUS

CROP	PE	ST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Asparagus	Apache cicada Asparagus beetle	Cutworms	1 1/4 to 2 1/2	1.0 to 0.5	Repeat applications as necessary up to a total of 3 times prior to harvest or a total of 5 times per crop but not more often than once every 3 days.
					For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
			2 1/2 to 5	0.5 to 0.25	Application to ferns or brush growth following harvest of spears: Repeat applications as necessary but not more often than once every 7 days. Do not make more than a total of 5 applications per year to spears and ferns combined.

#### **RESTRICTIONS AND PRECAUTIONS: ASPARAGUS**

- Do not apply within 1 day of harvest.
- Do not apply more than a total of 7 1/2 pounds per acre before harvest of spears.
- Do not apply more than a total of 12 1/2 pounds per acre per year.

## **BRASSICA LEAFY VEGETABLES CROPS**

CROP	PEST		POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 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.

## CEREAL GRAIN CROPS

CROP	P	EST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Field corn and Popcorn	Armyworm Chinch bugs Corn earworm Corn rootworm adults Fall armyworm	Japanese beetle Sap beetles Southwestern corn borer Leafhoppers	1 1/4 to 2 1/2	1.0 to 0.5	OBSERVE BEE CAUTION. Repeat applications as needed up to a total of 4 times but not more often than once every 14 days. Optimum timing and good
	Fiea beetles European corn borer		1 7/8 to 2 1/2	0.67 to 0.5	coverage are essential for effective control. For optimum chinch bug control, use ground
	Western bean cutworm	Cutworms	2 1/2	0.5	equipment to apply at least 20 gallons of water per acre and direct spray toward stalk to provide thorough coverage.
					For optimum European corn borer control, do not apply in less than 3 gallons of water per acre by air and 15 gallons of water by ground.
					For western bean cutworm, treat when infestation averages 15% and at 90 to 100% tassel emergence. Treatment after 100% silk emergence will reduce effectiveness.
					For optimum cutworm control, apply in a 12-inch band, over the row, using sufficient volume of water to obtain thorough coverage. For broadcast application, use at least 20 gallons by ground or 5 gallons by air per acre. For cutworm control, this product is most effective against species
					which feed on the upper portions of the plant.

RESTRICTIONS AND PRECAUTIONS: FIELD AND POP CORN

• Do not apply within 48 days of harvest of grain and fodder or within 14 days of harvest or grazing of forage or silage.

• Do not apply more than a total of 10 pounds per acre per crop.

## **GRAIN SORGHUM**

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Grain Sorghum	ArmywormFall armywormChinch bugsStink bugsCorn earwormWebworms	1 1/4 to 2 1/2	1.0 to 0.5	Repeat applications as necessary up to a total of 4 times but not more often than once every 7 days.
	Southwestern corn borer	1 7/8	0.67	Direct spray into forming heads for optimum control of insects attacking heads.
	Cutworms	2 1/2	0.5	For optimum chinch bug control, use high gallonage ground application at the base of plants.
				For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

#### **RESTRICTIONS AND PRECAUTIONS: GRAIN SORGHUM**

- Do not apply within 21 days of harvest for grain or fodder or within 14 days of harvest or grazing of forage or silage.
- Do not apply more than a total of 7 1/2 pounds per acre per crop.

## RICE

CROP		PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Rice	Armyworm Chinch bugs Fall armyworm	Leafhoppers Stink bugs	1 1/4 to 1 7/8	1.0 to 0.67	Up to 2 applications per crop may be made but not more often than once every 7 days.
	Tadpole shrimp		1 7/8	0.67	California only For optimum tadpole shrimp control, apply to water when pest first appears.

#### RESTRICTIONS AND PRECAUTIONS: RICE

- Do not apply within 14 days of harvest for grain or straw.
- Do not apply more than a total of 5 pounds per acre per crop.
- CAUTION: May kill shrimp, crabs, and crayfish.
- · Do not apply propanil herbicides within 15 days before or after application of this product or plant injury will result.

## SWEET CORN

CROP	PES	r	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Sweet Corn	Armyworm Chinch bugs Corn earworm Corn rootworm adults Fall armyworm Flea beetles	Japanese beetle Sap beetles Southwestern corn borer Leafhoppers	1 1/4 to 2 1/2	1.0 to 0.5	OBSERVE BEE CAUTION Repeat applications as necessary up to a total of 8 times but not more often than once every 3 days. Optimum timing and good coverage are essential for effective control.
	European corn borer		1 7/8 to 2 1/2	0.67 to 0.5	For insects attacking silks and ears,
	Western bean cutworm	Cutworms	2 1/2	0.5	insecticide sprays should be applied starting when first silks appear and continuing until silks begin to dry. During silking, the minimum retreatment interval (3 days) may not provide adequate levels of protection under conditions of rapid growth or severe pest pressure. The use of an alternative product should be considered in conjunction with this product. For optimum chinch bug control, use ground equipment to apply at least 20 gallons of water per acre and direct spray toward stalk to provide thorough coverage. For optimum European corn borer control, do not apply in less than 3 gallons of water per acre by air and 15 gallons of water by ground. For western bean cutworm, treat when infestation average 15% and at 90 to 100% tassel emergence. Treatment after 100% silk emergence will reduce effectiveness. For optimum cutworm control, apply in a 12-inch band, over the row, using sufficient volume of water to obtain thorough coverage. For broadcast application, use at least 20 gallons by ground or 5 gallons by air per acre. For cutworm control, this product is most effective against species which feed on the upper portions

## RESTRICTIONS AND PRECAUTIONS: SWEET CORN

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• Do not apply within 2 days of harvest of ears, within 14 days of harvest or grazing of forage, or within 48 days of harvest of fodder.

• Do not apply more than a total of 20 pounds per acre per crop.

## WHEAT AND PROSO MILLET

CROP		PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Wheat Proso Millet	Flea beetles		2/3 to 1 1/4	1.8 to 1.0	Up to 2 applications per crop may be made but not more often than once every 14 days.
	Cereal leaf beetle		1 1/4	1.0	]
DO NOT USE ON WHEAT AND PROSO MILLET IN	Armyworm	Fall armyworm	1 1/4 to 1 7/8	1.0 to 0.67	Application is effective against eggs, larvae, and adults of the cereal leaf beetle. Application for armyworm
CALIFORNIA					control should be made when armyworms are actively feeding on the upper foliage and night
					temperatures and not expected to drop below 55°F. If applying by air to lush growth, use a minimum
					spray volume of 5 gallons per acre to optimize coverage.

RESTRICTIONS AND PRECAUTIONS: WHEAT AND PROSO MILLET

• Do not apply within 21 days of harvest for grain or straw or within 7 days of harvest or grazing of forage.

Do not apply more than a total of 3 3/4 pounds per acre per crop.

## CUCURBIT VEGETABLES

CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Cucurbit Vegetables: Cucumbers	Pickleworm Melonworm	2/3 to 1 1/4	1.8 to 1.0	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days.
Melons Pumpkins Squash	Cucumber beetles Flea beetles Leafhoppers Squash bugs	1 1/4	1.0	For optimum control of squash bugs, apply sufficient spray volume for thorough coverage and time sprays for early morning or late afternoon.

#### **RESTRICTIONS AND PRECAUTIONS: CUCURBIT VEGETABLES**

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 7 1/2 pounds per acre per crop.
- Observe plant response precautions.

## FLAX

CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Flax DO NOT USE ON FLAX IN CALIFORNIA	Armyworm	1 1/4 to 1 7/8	1.0 to 0.67	Up to 2 applications per crop may be made but not more often than once every 14 days.

#### RESTRICTIONS AND PRECAUTIONS: FLAX

- Do not apply within 42 days of harvest for seed or straw.

• Do not apply more than a total of 3 3/4 pounds per acre per crop.

## FORAGE CROPS ALFALFA, CLOVERS, AND BIRDSFOOT TREFOIL

CROP	PE	ST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Alfalfa, Clovers, and Birdsfoot Trefoil	Blister beetles Mexican bean beetle		2/3 to 1 1/4	1.8 to 1.0	OBSERVE BEE CAUTION. Observe plant response precautions.
	Alfalfa caterpillar Bean leaf beetle Cucumber beetles Green cloverworm Japanese beetle Leafhoppers	Potato leafhopper Three cornered alfalfa hopper Thrips Velvetbean caterpillar	1 1/4	1.0	On dense growth, use 25 to 40 gallons of water per acre with ground equipment to ensure adequate coverage.
	Alfalfa blotch leafminer Armyworm Cloverhead weevil Corn earworm Cutworms Egyptian alfalfa weevil larvae	Essex skipper European alfalfa beetle Fall armyworm Lygus bugs Stink bugs Webworms Yellow striped armyworm	1 1/4 to 1 7/8	1.0 to 0.67	For alfalfa weevil larvae, if pretreatment damage is extensive, cut alfalfa and treat the stubble. This product is not effective against adult alfalfa weevils. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
- 1	Alfalfa weevil larvae (west of the Rocky Mountains)		1 1/4 to 1 7/8	1.0 to 0.67	
	Alfalfa weevil larvae (east of the Rocky Mountains)		1 7/8	0.67	

## RESTRICTIONS AND PRECAUTIONS: FORAGE CROPS

- Do not apply more than once per cutting.
- · Do not apply within 7 days of harvest or grazing.
- Do not exceed 1 7/8 pounds per acre per cutting.
- · Carbaryl may cause a temporary bleaching of tender alfalfa foliage.

## PASTURE AND GRASSES GROWN FOR SEED

CROP	Ρ	EŜT	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 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 <sup>®</sup> 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.

## FRUITING VEGETABLES

CROP	P	EST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Fruiting Vegetables: Tomatoes, Peppers,	Colorado potato beetle European corn borer Fall armyworm	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.
Eggplant	Lace bugs Stink bugs (suppression) Tarnished plant bug				Thorough coverage is essential to effectively suppress stink bugs.
	Tarrisiled plant bug Thrips (suppression) Tomato fruitworm				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 <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Leafy vegetables:	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.
Celery, Dandelion, Endive, Lettuce (head and leaf), Parsley, Spinach, Swiss Chard	Armyworm Aster leafhopper Corn earworm Fail 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.

## LEGUME VEGETABLES

CROP	P	EST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Legume Vegetables: Soybeans, Fresh and Dried	Bean leaf beetle Blister beetle Cucumber beetles Grape colapsis	Green cloverworm Japanese beetle Mexican bean beetle Velvetbean caterpillar	2/3 to 1 1/4	1.8 to 1.0	Repeat applications as necessary up to a total of 4 times but not more often than once every 7 days.
Beans ( <i>Phaseolus</i> species	Corn earworm		2/3 to 1 7/8	1.8 to 0.67	For cutworm control, this product is most effective against species which feed
species including snap, navy and kidney),	Alfalfa caterpillar Colorado potato beetle Flea beetles Leafhoppers	Three cornered alfalfa hopper Thrips Western bean cutworm	1 1/4	1.0	on the upper portions of the plant. Use lower rates for light to moderate populations and smaller instars and to provide maximum survival of beneficial insects and
Fresh and Dried Peas ( <i>Pisum</i> species), Lentils.	Armyworm Cutworms European corn borer Fall armyworm	Stink bugs Tarnished plant bug Webworms	1 1/4 to 1 7/8	1.0 to 0.67	spiders. Use the higher rates for heavy populations and larger instars.
Lentils, Cowpeas, Southern Peas DO NOT USE ON LENTILS IN CALIFORNIA	Alfalfa looper (suppression) Cowpea curculio (suppression) Painted lady (Thistle caterpillar) Pea leaf weevil	Pea weevil Saltmarsh caterpillar Woollybean caterpillar Yellowstriped armyworm	1 7/8	0.67	
	California only: Corn earworm (suppression) Limabean podborer (suppression)	Lygus bugs (suppression) Stink bugs (suppression)	1 7/8	0.67	

#### RESTRICTIONS AND PRECAUTIONS: LEGUME VEGETABLES

• Do not apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed, or hay.

• Do not apply more than a total of 7 1/2 pounds per acre per crop.

• Do not apply a combination of this product and 2,4-DB herbicides to soybeans as crop injury may result.

Observe plant response precautions.

## NON CROPLAND

CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 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	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.
Rights-of-Way Hedgerows Ditchbanks Roadsides	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.

	OKRA					
CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS		
Okra	Corn earworm Stink bugs	1 1/4 to 1 7/8	1.0 to 0.67	Apply using ground equipment in sufficient volume to insure good coverage.		
DO NOT USE				Apply as needed on 6 to 8 day intervals.		
ON OKRA IN CALIFORNIA.				For grasshopper control, refer to the general Grasshopper Section.		

## **RESTRICTIONS AND PRECAUTIONS: OKRA**

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 7 1/2 pounds per acre per season.

## PEANUTS

CROP	Р	EST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Peanuts	Blister beetles Mexican bean beetle		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.
	Alfalfa caterpillar Bean leaf beetle Cucumber beetle Green cloverworm Japanese beetle Leafhoppers	Rednecked peanutworm Three cornered alfalfa hopper Thrips Velvetbean caterpillar	1 1/4	1.0	For optimum control of thrips, use directed or banded sprays with hollow cone spray nozzles. Ensure adequate coverage for the underside of leaves.
	Armyworm Corn earworm Fall armyworm	Stink bugs Webworms	1 1/4 to 1 7/8	1.0 to 0.67	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
	Whitefringed beetle adults	Cutworms	2 1/2	0.5	 

#### RESTRICTIONS AND PRECAUTIONS: PEANUTS

- Do not apply within 14 days of harvest.
- Do not apply more than a total of 10 pounds per acre per crop.
- Observe plant response precautions.

## PRICKLY PEAR CACTUS

CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Prickly Pear Cactus	Cochineal scale (crawlers)	2 1/2	0.5	Apply using ground equipment in sufficient volume to insure good coverage.
DO NOT USE				Apply as needed on 7 to 10 day intervals.
ON PRICKLY PEAR CACTUS IN CALIFORNIA				For grasshopper control, refer to the general Grasshopper Section.

#### RESTRICTIONS AND PRECAUTIONS: PRICKLY PEAR CACTUS

- Do not apply within 3 days of harvest.
- Do not apply more than a total of 7 1/2 pounds per acre per season.

## **ROOT AND TUBER CROPS**

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

CROP	PI	EST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Root and Tuber Crops:	Flea beetles Leafhoppers		2/3 to 1 1/4	1.8 to 1.0	Repeat applications as necessary up to a total of 6 times but not more often than once every
Garden Beets, Carrots, Horseradish, Parsnips, Radishes, Rutabagas, Salsify, Potatoes	Armyworm Aster leafhopper Colorado potato beetle Corn earworm Cutworms European corn borer Fall armyworm	Lace bugs Lygus bugs Spittlebugs Stink bugs Tarnished plant bug	1 1/4 to 2 1/2	1.0 to 0.5	7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

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

• Do not apply within 7 days of harvest.

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• Do not apply more than a total of 7 1/2 pounds per acre per crop.

## SUGAR BEETS

CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Sugar beets	ArmywormFlea beetleBeet leaf beetleLeafhopperFall armywormWebworms		1.0 to 0.67	Repeat applications as necessary up to a total of 2 times but not more often than once every 14 days.
	Cutworms	1 7/8	0.67	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

#### RESTRICTIONS AND PRECAUTIONS: SUGAR BEETS

- Do not apply within 28 days of harvest for roots or forage.
- Do not apply more than a total of 5 pounds per acre per crop.

## SWEET POTATOES

CROP		PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Sweet Potatoes	Corn earworm Cucumber beetles Flea beetles Sweet potato hornworm	Sweet potato weevil Tortoise beetles Whitefringed beetle	1 1/4 to 2 1/2	1.0 to 0.5	Preplant dip for control of sweet potato weevil: Just prior to planting, dip sweet potato cuttings in a suspension containing 10 pounds of this product in 100 gallons of water (1.6 ounces of this product per gallon of water)
	Yellowstriped armyworm		2 1/2	0.5	For foliar sprays, repeat applications as necessary up to a total of 8 times but not more often than once every 7 days.

## **RESTRICTIONS AND PRECAUTIONS: SWEET POTATOES**

Do not apply within 7 days of harvest.

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• Do not apply more than a total of 10 pounds per acre per crop with in-season sprays.

• Do not apply more than a total of 1 1/2 pounds per acre as a preplant dip treatment.

## SMALL FRUITS AND BERRIES

CROP	PE	ST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Small Fruits and Berries: Caneberries, Blueberries, Cranberries, Grapes, Strawberries	European fruit lecanium European raspberry aphid Flea beetles Grape leaffolder Grape leafroller Japanese beetle Leafhoppers Leafrollers Meadow spittlebug Omnivorous leaftier	Rose chafer Snowy tree cricket Strawberry bud weevil Strawberry clipper Strawberry fruitworm Strawberry leafroller Strawberry weevil Western grapeleaf skeletonizer Western yellowstriped armyworm	1 1/4 to 2 1/2	1.0 to 0.5	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 5 times but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant. In grapes for grape leaffolder control, apply before first brood larvae emerge from rolls.
	Blueberry maggot Cherry fruitworm Cranberry fireworm Cranberry fruitworms Cranberry twig girdler	Elm spanworm Gypsy moth Spaganothus worm Tarnished plant bug	1 7/8 to 2 1/2	0.67 to 0.5	In grapes, do not concentrate spray on the bunch or visible residues may result.
	Eight-spotted forester Cutworms Grape berry moth June beetles Omnivorous leafroller	Orange tortrix Raspberry fruitworm Raspberry sawfly Redbanded leafroller Saltmarsh caterpillar	2 1/2	0.5	

RESTRICTIONS AND PRECAUTIONS: SMALL FRUITS AND BERRIES

Do not apply within 7 days of harvest.

• Do not apply more than a total of 12 1/2 pounds per acre per crop.

CAUTION: Use in cranberries may kill shrimp and crabs. Do not use in areas where these are important resources.

Carbaryl may injure Early Dawn and Sunrise varieties of strawberries.

## SUNFLOWERS

CROP		PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Sunflowers	Stern weevil Sunflower beetle		1 1/4 to 1 7/8	1.0 to 0.67	Up to 2 applications may be made but not more often than once every 7 days.
DO NOT USE ON SUNFLOWERS IN CALIFORNIA	Armyworm Cutworms	Fall armyworm Sunflower moth	1 7/8	0.67	For cutworm control, this product is most effective against species which feed on the upper portions of the plant.

## RESTRICTIONS AND PRECAUTIONS: SUNFLOWERS

• Do not apply within 30 days of grazing or harvest for forage or within 60 days of harvest for seed.

• Do not apply more than a total of 3 3/4 pounds per acre per crop.

## TOBACCO

CROP	P	EST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Tobacco	Budworms Fall armyworm Tobacco flea beetles Hornworms	Japanese beetle June beetle Suckfly	1 1/4 to 2 1/2	1.0 to 0.67	Plant bed and Field Treatment Repeat treatments as necessary up to a total of 4 times per crop but not more often than once every 7 days.
					Use lower rate on young plants (up to knee height). Use at least 10 gallons of prepared spray per acre. Begin treatments when worms are small.

#### **RESTRICTIONS AND PRECAUTIONS: TOBACCO**

- Tobacco may be harvested on the day of treatment.
- Do not apply more than a total of 10 pounds per acre per crop.
- Observe plant response precautions.

## TREE FRUIT CROPS

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

#### POUNDS OF ACRES SEVIN® TREATED per PEST SPECIFIC DIRECTIONS CROP PAK SEVIN® **80WSP PER** 80WSP ACRE Avocado leafroller Orange Tortrix 0.5 to 0.3 **OBSERVE BEE CAUTION. Citrus Fruits** 2 1/2 to 3 3/4 Western tussock California orangedog Repeat applications as Citrus cutworm moth necessary up to a total of 8 Fruittree leafroller times but not more often than once every 14 days. Citrus rust mite Scale insects [Black 0.3 to 0.2 3 3/4 to 6 1/4 For scale control, apply when Eriophyid mites scale, brown soft crawlers are present. Plant bugs scale, California For best control of Eriophyid red scale (except mites including citrus rust mite, in California), apply when pest populations are citrus snow scale, low. yellow scale (except in California)] Apopka weevil (adult) Fuller Rose Beetle 6 1/4 to 9 3/8 0.2 to 0.13 Citrus root weevils Little leaf notcher (adults) (adult) Do not make more than 1 0.2 to 0.05 California only: 6 1/4 to 20 application per season for California red scale Yellow scale California red scale. Apply when crawiers are present.

## **CITRUS FRUITS**

#### 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 <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 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

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CROP	PEST		POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 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
	Apple aphid	Codling moth	1 1/4 to 3 3/4	1.0 to 0.3	also may result in fruit removal.
	Apple aphid Apple maggot Apple mealybug Apple rust mite Bagworms California pearslug (pear sawfly) European apple sawfly Eyespotted bud moth Fruittree leafroller Gypsy moth Japanese beetle Lesser appleworm Lygus bugs Orange tortrix	Pearleaf blister mite Pear psylla Pear rust mite Periodical cicada Plum curculio Redbanded leafroller Rosy apply aphid Scale insects (Forbes scale, Lecanium scale, San Jose scale) Tamished plant bug Tentiform leafminers Woolly apple aphid Yellowheaded fireworm	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.

## POME FRUITS (continued)

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Apples		1 1/4 to 3 3/4	1.0 to 0.3	OBSERVE BEE CAUTION.
Only, for Fruit Thinning				For easily thinned varieties: apply 1/3 to 2/3 pounds per 100 gal, of spray mixture.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				For difficult to thin varieties: apply 2/3 to 1 1/4 pounds per 100 gal. of spray mixture.
				Apply between 10 and 25 days after full bloom. Factors such as tree age, variety, nutrition, previous crop, pruning, bloom and degree of set favor excessive fruit thinning with this product. Exercise caution to avoid possible yield reduction. Rates may vary depending on variety and local orchard conditions. Consult with your County Extension Service or other experts for advice on the proper use of this product.
				<b>CAUTION:</b> The use of SEVIN <sup>®</sup> 80WSP 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.
				deformity. The use with summer spray oils and wetting agents may increase the risk of fruit deformity and injury.

#### **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	PE	ST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	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 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 1/2 to 3 3/4	0.5 to 0.3	OBSERVE BEE CAUTION. Repeat applications as necessary up to a total of 3 times per crop but not more often than once every 7 days. An additional application at the dormant or delayed dormant timing may be made. For optimum scale control, apply when crawlers are present. For lesser peachtree borer, best results have been found by thoroughly spraying limbs and tree trunks at weekly intervals during moth flight.
	Californi 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	a Only: 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 3/4 to 5	0.3 to 0.25	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)		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: 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.

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## **TREE NUT CROPS**

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

## PISTACHIOS

CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 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.

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 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

CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Tree Nuts:	Black margined aphid	2 1/2 to 6 1/4	0.5 to 0.2	OBSERVE BEE CAUTION
Almonds, Chestnuts, Filberts, Pecans, Walnuts	Calico scale Codling moth European fruit lecanium Fall webworm Filbert aphid Filbert leafroller Filbertworm			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.
	Frosted scale Fruittree leafroller Hickory shuckworm Lesser webworm			Use lower rates for pests attacking leaves. Use higher rates for pests attacking fruit and for highe infestations.
	Navel orangeworm Peach twig borer			For scale control, apply when crawlers are present.
	Pecan leaf phylioxera Pecan stem phylioxera Pecan nut casebearer Pecan spittlebug Pecan weevil San Jose scale			For peach twig borer, best results with foliar applications have beer found by making applications in "popcorn" or petal fall stages when the May brood begins to hatch.
	Twig girdler Walnut caterpillar			For navel orangeworm in almond and walnuts, best results have been found by timing early and midseason applications to correspond with mot flight peaks.
				For filbert leafroller, best results have been found by making application when eggs are hatching, repeating application on first appearance of moths and again 3 to 4 weeks later.
				For codling moth in walnuts, bes 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	5 to 6 1/4	0.25 to 0.2	For chestnut weevil, best results have been found with 4 applications a 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	5 to 6 1/4	0.25 to 0.2	For dormant or delayed dorman- timing, apply in combination with a recommended dormant oil. Refer to the dormant oil product label fo 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 18 3/4 pounds per acre per crop, including any application at the dormant or delayed dormant timing.

## 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.

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CROP	P	EST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
Forested areas:	Ants Apple aphid	Maple leafcutter Mealy bugs	1 1/4	1.0	Observe plant response precautions.
Forested areas: Non-urban Forests, Tree Plantations, Planted Christmas Trees, Parks, Rural Shelter Belts Rangeland Trees	Ants Apple aphid Armyworm Ash whitefly Azalea leafminer Bagworms Balsam twig aphid Birch leafminer Blister beetle Boxelder bug Boxwood leafminer Brown tail moth Cankerworms Catalpa sphinx Chiggers Cooley spruce gall adelgid Cutworms Cypress tip moth Douglas-fir tussock moth Eastern spruce gall adelgid Elm leaf aphid Elm leaf beetle Elm spanworm Eriophyid mites European pine shoot moth Fall armyworm Flea beetle 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	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 Sawfiles (exposed) Scale insects (crawlers) Sowbugs Spiney elm caterpillar Springtails Spruce needleminer Subtropical pine tip moth Tent caterpillars Thorn bug Thrips (exposed) Ticks Walnut caterpillar			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.
	needleminer June beetles Lace bugs	Western hemlock looper Western spruce			
	Leafhoppers	budworm			
	Leafrollers	Willow leaf beetles			
	Locust borer	Wooly gall aphid Yellow poplar weevil			
	Gypsy Moth	. chor popial trootil	9/10 to 1 1/4	1.3 to 1.0	1

## 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	Elm bark beetle Ips engraver beetles Mountain pine beetle Roundheaded pine beetle	2% solution (1 pak per 6.67 gallons)	See Specific Directions	<b>Direct Trunk Treatment:</b> Effective as a preventative treatment only. Repeat annually as required to prevent beetle attacks.
Christmas Trees, Parks, Rural Sheiter Belts Rangeland Trees	Spruce beetle Westem pine beetle			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.

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

## 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.

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ints pple aphid srmyworm sh whitefly zalea leafminer agworms alsam twig aphid irch leafminer lister beetle oxelder bug oxwood leafminer	Maple leafcutter Mealy bugs Mimosa webworm Nantucket pine tip moth Oak leafminers Oak moth Oak skeletonizer Oakworm complex	1 1/4	1.0	Observe plant response precautions. Obtain thorough coverage of upper and lower lead surfaces. The addition of a
~				sticker may improve residual control. To control scale insects, treat trunks, stems and twigs
irrown tail moth sakerworms satalpa sphinx biggers sooley spruce gall adelgid sutworms sypress tip moth louglas-fir tussock moth astem spruce gall adelgid im leaf aphid Im leaf beetle Im spanworm riophyid mites uropean pine shoot moth all armyworm lea beetle uschia gall mite uiler rose beetle all midges sall wasps areenstriped mapleworm arasshoppers lackberry nipplegall maker olly bud moth olly leafminer ackpine budworm apanese beetle affrey pine needleminer une beetles ace bugs eafhoppers eafrollers	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 Thom bug Thrips (exposed) Ticks Walnut caterpillar Webworms Western hemiock looper Western spruce budworm Willow leaf beetles			<ul> <li>Iteat fruitis, sterns and twigs in addition to plant foliage.</li> <li>For optimum worm control, treat when pests are small.</li> <li>Do not use on syrup- producing sugar maples where sap is harvested.</li> <li>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.</li> <li>Repeat treatments as necessary up to a total of 6 times per year but not more often than once every 7 days.</li> <li>For gypsy moth control, use the higher rate for heavy infestations.</li> </ul>
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## TREES AND ORNAMENTALS, CONTINUED

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Trees, Ornamentals (Roses, Flowers, Other Herbaceous Plants), Woody	Elm bark beetle Ips engraver beetles Mountain pine beetle Roundheaded pine beetle Spruce beetle	2% solution (1 pak per 6.67 gallons)	See Specific Directions	<b>Direct Trunk Treatment:</b> Effective as a preventative treatment only. Repeat annually as required to prevent beetle attacks.
Plants, Shrubs in Commercial and Residential Areas and in Nursery Production Areas	Western pine beetle			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 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 Turfgrass: golf turf, sports fields, sod farms, domestic and commercial lawns, cemeteries, parks, campsites, recreational areas.		PEST	POUNDS OF SEVIN® 80WSP PER ACRE	SQ. FT. TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
	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 Fail 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
	Chinch bugs Sod Webworm (lawn moths)		7 1/2 to 10	5,000 to 7,000	often than once every 7 days. 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** 

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

## GRASSHOPPERS

CROP	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
All crops on this label	Grasshoppers	2/3 to 1 7/8*	1.8 to 0.67	Apply 2/3 to 9/10 pounds per acre of this product for nymphs on small plants or sparse vegetation. Apply 1 1/4 to 1 7/8 pounds per acre for mature grasshoppers or applications to dense foliage or if extended residual control is desired. Be certain spray volumes are appropriate to assure adequate coverage.

#### **RESTRICTIONS AND PRECAUTIONS: GRASSHOPPER CONTROL**

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

## CONTROL OF TICKS WHICH VECTOR LYME DISEASE

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

CROP/SITE	PEST	POUNDS OF SEVIN® 80WSP PER ACRE	ACRES TREATED per PAK SEVIN <sup>®</sup> 80WSP	SPECIFIC DIRECTIONS
All crops on this label	<i>lxodes</i> spp. (Deer tick, Bear tick, Black	1 1/4 to 2 1/2*	1.0 to 0.5	Use the high rate for heavy tick infestations.*
Pastures Forested Areas Wasteland, Rights-of-Way,	legged tick) Amblyomma spp.			Use higher spray volumes for dense ground cover or heavy leaf litter.
Hedgerows, Ditchbanks, Roadsides, Set-Aside and Conservation Reserve	(Lone star tick)			Target applications for nymphal control in late spring or early summer. Control of adult tick can be obtained with late summer and fall applications.
Program Acreage Trees and Ornamentals Turfgrass				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	DRENCH APPLICATION: Apply a total of 2 gallons of the diluted solution over the surface of each mound or at least 1 quart per 6 inches of mound diameter using a bucket, can or other appropriate equipment. Thoroughly wet mound and surrounding areas to a 4 ft diameter (12 sq.ft.). Do not disturb mound prior to treatment. Pour solution from a height of about three feet to give sufficient force to break mound apex and flow into ant tunnels. For best results apply in cool weather (65-80°F) or in early morning or late evening hours. Repeat application if mound activity resumes after 7 days. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.
Nursery Stock, Vegetable Transplants*, Foliage Plants, Bedding Plants (Outdoor Use Only)	Imported fire ants	1 pak per 67.6 gallons	See Specific Directions	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.

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 \*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.

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CROP	PEST	POUNDS OF SEVIN <sup>®</sup> 80WSP PER ACRE	ACRES TREATED per PAK SEVIN® 80WSP	SPECIFIC DIRECTIONS
Pastures Rangeland	Mosquitoes (adults)	1/3 to 1 1/4*	1.0	OBSERVE BEE CAUTION.
Forested Lands Trees and Ornamentals Turfgrass Wastelands				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.

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## 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** 

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

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

#### **IMPORTANT: READ BEFORE USE**

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

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

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

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Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)

SEVIN 80WSP Carbaryl Insecticide (PENDING) Submitted 11/3/03.