MAY 2 1 1987

Mr. Julius Prinzo Agway, Inc., Crop Services F.O. Box 4741 Syracuse, NY 13221

Dear Mr. Prinzo:

Subject: Label Amendment

Sevin 4E

EPA Registration No. 8590-419

Your Application Dated February 11, 1987

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act. as amended, is acceptable. A stamped copy is enclosed for your records.

Make the labeling change listed below before you release the product for shipment bearing the amended labeling:

- Please revise number of quarts of Sevin/100 gallons to 1 instead of 1 to 2 for Douglas-fir and Balsam twig aphid (Proposed Change #8 of the draft label).

The percent of carbaryl declared in both formulations, EPA Registration Fig. 11678-43 and 264-324, in the Confidential Statement of Formula (CSF) dated February 10, 1987 is 99% pure. The percent declared in column 13.b. is 42.6. Consequently, 42.6 x 99% = 42.17 which is below the label claim of 42.6 percent. Column 14.b. in the CSF should be same as label claim. Please revise the label or the CSF so the information agrees.

Submit five (5) copies of your final printed labeling.

Sincerely yours,

Dennis Edwards
Acting Product Manager (12)
Insecticide-Rodenticide Branch
Registration Division (TS-767C)

REST AVAILABLE COPY

Enclosure

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OFFICIAL FILE COPY



SHEET NO. 1 - 26

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE DATE: 2/11/87 FOR: (((FRONT PANEL))) NET CONTENTS 23,5,30,55 Gal. AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE An Aqueous suspension containing 4 pounds of carbaryl Insecticide per gallon. For aerial or ground application. ACTIVE INGREDIENTS: Carbaryl (1-Naphthyl N-Methylcarbamate) 42.6% INERT INGREDIENTS: 57.4% TOTAL 100.0% *trademark of Union Carbide Corp. for the active ingredient 1-Naphthyl N-Methylcarbamate. KEEP OUT OF REACH OF CHILDREN (12 pt.) CAUTION (18 pt.) See additional precautionary statements on side panel. EPA REG. NO. 8590-419 ዕ፡ሩ ፅሃ EPA EST. NO. 8590-PA-1 AGWAY, INC. ACCEPTED S. S. CO.IMENTE Crop Services ter Dated BOX 4741 SYRACUSE, NY 13221 C_{BCCr} . Insecticida Funcia La lenticide Act ns amended, for the pesticide registered under EPA Reg. No.



FOR:

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE

DATE: 2/11/87

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(((REAR PANEL)))

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION:

May be harmful if swallowed. Avoid breathing spray mist.

Avoid contact with eyes, skin or clothing. Wash thoroughly
after handling.

PROPOSED REVISION #1 ATTACHED

STATEMENT OF PRACTICAL TREATMENT

If swallowed - Call a physician or Poison Control Center immediately. Drink one or two glasses of water and induce vomiting by touching the back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

If inhaled - Remove victim to fresh air. Apply
artificial respiration if indicated.

If on skin - Remove contaminated cothing and wash affected areas with soap and water.

If in eyes - Flush eyes with plenty of water.
Call a physician immediately.

O'K BY

SHEET NO. 2 - 26

PROPOSED CHANGE

PRECAUTIONARY STATEMENTS CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS:
MAY BE HARMFUL IF SWALLOWED. OVEREXPOSURE MAY
CAUSE: Salivation, watery eves, prinoint eye publis, blurred
vision, muscle tremors, difficult breathing, excessive sweating,
abdominal cramps, nausea, vomiting, diarrhea, weakness,
neadache. IN SEVERE CASES CONVULSION,
UNCONSCIOUSNESS AND RESPIRATORY FAILURE MAY
OCCUR, SIGNS AND SYMPTOMS OCCUR RAPIDLY FOLLOWING OVEREXPOSURE TO THIS PRODUCT.

Avoid breathing spray mist. Do not take internally. Avoid contact with eyes, skin or clothing. Wear regular long-steeved work clothing and head covering when making overhead applications. Change to clean clothing daily. Bathe and wash hair after each work day. Do not eat, drink or use lobacco while working with this product or spray solutions. Wash hands and face before eating, drinking or using tobacco. Keep out of reach of children and domestic animals

ANTIDOTE STATEMENT

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

STATEMENT OF PRACTICAL TREATMENT

Contact a physician immediately in all cases of suspected poisoning. Transport patient 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.

IF SWALLOWED: Never give anything by mouth to an unconscious or convulsing person. If conscious and not convulsing, drink 1 to 2 glasses of water and induce vomiting by touching the back of the throat with finger.

IF IN EYES: Flush eyes with plenty of water. Get medical attention if irritation persists.

IF ON SKIN, Wash thoroughly with soap and water. IF INHALED: Move from contaminated atmosphere and call a physician.





Revision #2
attachel

FOR:

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE

DATE: 2/11/87

NOTE FOR PHYSICIAN: Carbaryl is a moderate, reversible cholinesterase inhibitor. Atropine is antidotal. Do not use 2-PAM, opiates, or cholinesterase inhibiting drugs.

#:04 | 10 0-14401649 60 76 - 00-48401649

ENVIRONMENTAL HAZARDS

This product is extremely toxic to aquatic and estuarine invertebrates. Do not apply directly to water or wetlands except under the forest canopy. Do not contaminate water by cleaning of equipment or disposal of wastes.

O'K BY

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.

O'K BY

PROPOSED CHANGE #2

NOTE TO PHYSICIAN

'n

Carbaryl is a carbamate insecticide, which is a cholinesterase inhibitor. Overexposure to this substance may cause loxic 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 £,nd prompt removal of stomach contents is indicated. Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent overatropinization. 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 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, orugs like 2-PAM (pyridine-2-algoxime methiodice) are NOT recommended.

To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen.





FOR:

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE

DATE: 2/11/87

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DIRECTIONS FOR USE

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

STORAGE & DISPOSAL (12 pt.)

PROHIBITION: Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited. Do not reuse empty container.

STORAGE: Store unused product in original container only. Store in a cool, dry area out of the reach of children and animals. Not for storage in or around the home. Protect from excess heat.

It is imperative that all Sevin Flowable formulations be stored and protected from freezing.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: (2 1/2 gal) Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(All other containers) Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Subsequent planting of food and feed crops in treated soil must be made with crops on this or other carbaryl label(s).



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FOR:

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE

DATE: 2/11/87

PRODUCT INFORMATION:

Sevin 4F is an extremely fine dispersion of Sevin in water. The dilute spray is tenacious and quick setting, giving an adhesive residue to plants on partial drying. The product readily disperses in water to form a spray which may be applied by air or ground.

OBSERVE THE FOLLOWING USE PRECAUTIONS:
Read all label directions before using.

Sevin is unstable under highly alkaline conditions. Do not use with lime, bordeaux, lime-sulfur, casein lime spreaders or other alkaline materials.

Sevin has been used without plant injury common insecticides and fungicides, except where mixtures have contained a number of pesticides, or under adverse conditions such as high humidity, drought, improper fertilization, etc. Do not combine with emulsifiable liquids, wettable powders, nutrients or adjuvants (or with more than one other pesticide) unless previous use

O'K BY



FOR:

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE

DATE: 2/11/87

of the mixture has proven compatible and safe to plants. Compatibility can be affected by water in your locality or ingredients in other products. Do not apply if physically incompatible.

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PREHARVEST AND GRAZING USE INFORMATION & LIMITATIONS

Tolerances established under the Federal Food,
Drug, and Cosmetic Act permit the sale of crops
bearing probable carbaryl residues when this product is used in accordance with 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.

This product may be applied up to and including
the day of harvest or grazing of forage crops.

Application may be made without removing livestock from area being treated.

O'K BY

Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals or onto adjoining food, fiber or pasture crops.

THE GROWER IS RESPONSIBLE for residues on his crop as well as for damages caused by drift from his property to that of others.



FOR:

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE

DATE-2/11/87

Consult State Agricultural Extension Service or State Agricultural Experiment Stations for additional information, as the timing number of applications will vary with local conditions.

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PLANT RESPONSE PRECAUTIONS

To avoid possible injury to tender foliage, do not apply to wet foliage or when rain or high humidity is expected during the next two days.

SEVIN injures Boston ivy, Virginia creeper and maidenhair fern. During early season, it may also injure Virginia and sand pines.

Observe label instructions on apple thinning and on combinations with certain herbicides on soybeans.

INSECT CONTROL

Apply when insects or their damage appears. To maintain control repeat at 7 to 14 day intervals or as necessary unless a shorter interval is specified below. Where a dosage range is indicated, use lower rate on young plants and early instars and higher rate on mature plants, advanced instars and adults. Thorough and uniform spray coverage is essential for effective control.

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FOR:

AGWAY SEVIN 4F AGRICULTURAL INSECTICIDE

DATE: 2/11/87

Apply in sufficient spray volume to obtain thorough coverage. Where maximum washoff resistance is needed, use up to a 1:1 (vol/vol) dilution with water. Do not dilute greater than 1:11 where washoff resistance is desired.

This product does not control spider mites.

If spider mites are a problem, use a registered miticide. Treated areas may be reentered immediately after the spray has dried.

RE-ENTRY

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may, require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Written warnings must include the following information:



FOR:

SEVIN 4F

DATE: 2/11/87

CAUTION

(Insert area or field description) treated with Sevin on (insert date of application). Do not enter treated areas without protective clothing until sprays have dried. In case of accidental exposure: Call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to Sevin and describe his condition. For further information see the "Statement of Practical Treatment."

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Oral warnings must include the same information that is in the written warnings.

FORAGE, FIELD AND VEGETABLE CROPS

Use at least 1 gallon of finished spray per acre for aerial application and at least 3 gallons of finished spray per acre for concentrate ground application. To prepare small volumes of spray, use 1 tablespoonful (% fluid ounce) per gallon of water where rates of 1 quart per acre or 1 quart per 100 gallons are indicated in the tables below.

O'K BY

Unless otherwise specified, rates are in terms of Sevin 4F per acre in sufficient water for thorough coverage.

Days as pre-harvest interval are indicated in () after crop.

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FOR:

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Alfalfa, Clovers:

Blister beetles, Mexican bean beetle. Use 1 to 2 pts. Alfalfa caterpillar, bean leaf beetle, cucumber beetles, green cloverworm,

Japanese beetle, leafhoppers, three-cornered alfalfa hopper, thrips, velvet bean caterpillar.

Use 2 pts. Armyworms, corn earworm, stink bugs, webworms. Use 2 to 3 pts. Alfalfa weevil
Use 2½-3 pts. (Eastern States) and 2 pts.

(Western States) for control of alfalfa weevil larvae in the spring. If pre-treatment damage

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FOR: SEVIN 4F

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is extensive, cut the alfalfa and make the application to the stubble. Cutworms - Use 3 pts.

Application: To avoid possible injury on tender foliage - do not apply when foliage is wet or when rain cr excessive humidity is expected during the next 2 days. (Alfalfa - 3 1/5 pts., Clover - 3 pts.) Do not apply within 3 days of harvest on alfalfa.

Asparagus:

Asparagus beetle on seedlings or spears. Use 2 to 4 pts.

Application: Do not apply more often than once every 3 days. Do not apply within 1 day of harvest. (4 pts.) Post-harvest: Asparagus beetle and apache cicada on ferns or brush growth. Use 4 to 8 pts. (8 pts.)

Beans (Green, Lima, Snap, Cowpeas, Black-eyed Peas):

Mexican bean beetle. Use 1 pt. Bean leaf beetle, cucumber beetles, flea beetles, Japanese beetle, leafhoppers, velvet bean caterpillar, western bean cutworm. Use 2 pts. Armyworms, cutworms, corn earworm, stink bugs, tarnished

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FOR: SEVIN 4F

DATE: 2/11/87

plant bugs. Use 2 to 3 pts. Cowpea curculio (on cowpeas only), Use 4 pts.

PCA (QCH4RAC*14)

Application: Apply 4 applications beginning at first bloom and at 5 day intervals thereafter. Do not apply within 3 days of harvest on cowpeas.

Carrots, Chinese Cabbage, Collards, Dandelion,
Endive (Escarole), Garden Beets, Horseradish,
Kale, Lettuce, Mustard Greens, Parsley, Parsnips, Radishes, Rutabagas, Salsify, Swiss
Chard, Turnips:

Flea beetles, harlequin bug, leafhoppers.

Use 1 to 2 pts. Six-spotted leafhopper (aster yellows vector). Use 2 to 3 pts. on a 5 to 7 day schedule. Armyworms, imported cabbage worm, diamond-back moth larvae and loopers, corn earworm, tarnished plant bug, stink bugs. Use 2 to 4 pts.

Application: For optimum control of corn earworm after lettuce heads begin to form, use

4 pts. in a 5 to 7 day schedule. Where cabbage
looper is the principal problem, use an alternative pesticide that is specifically recommended.
For control of small cabbage loopers in commercial plantings after edible portions begin to

O'K BY

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FOR: SEVIN 4F

DATE:2/11/87

form, use 2 to 4 pts. in a 5 to 7 day schedule. To avoid possible injury on lettuce, do not apply when foliage is wet or when rain or excessive humidity is expected during the next 2 days. Do not apply within 3 days of harvest of head lettuce, garden beets (roots), horseradish, radishes, parsnips, rutabagas, salsify (roots), and turnips (roots). Do not apply within 14 days of harvest of chinese cabbage, collards, dandelion, endive (escarole), garden beets (tops), kale, leaf lettuce, mustard greens, parsley, salsify (tops), spinach, swiss chard and turnips (tops), (4 pts.)

Cole Crops (Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Kohlrabi):

Flea beetles, harlequin bug, Use 1 to 2 pts.

Armyworms, imported cabbage worms, diamond back
larvae and loopers, corn earworm. Use 2 to 4
pts. Where cabbage looper is the principal
problem, use an alternative pesticide that is
specifically recommended. For control of small
cabbage loopers in commercial plantings after
edible portions begin to form, use in a 5 to 7
day schedule. Do not apply within 3 days of
harvest. (4 pts.)

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FOR: SEVIN 4F

DATE: 2/11/87

Corn:

Corn earworm, corn rootworm adults, European corn borer, fall armyworm, flea beetles, Japanese beetle, leafhoppers, sap beetles. Use 2 to 4 pts. For larvae in whorl (budworm damage) and foliage feeders, apply to entire plant - repeat as necessary. For insects attacking silks and ears, apply at 2 to 3 day intervals starting when first silks appear and continuing until silks begin to dry. Three or more applications may be required depending on severity of infestation.

Timing and good coverage are absolutely essential for effective control. Cutworms - use 4 pts.

Application to the tassel region of corn during the pollen shed period will seriously reduce bee populations. (4 pts.)

Cucumbers, Melons, Pumpkins, Squash:

Melonworm, pickleworm, use 1 to 2 pts. Cucumber beetles, flea beetles, leafhoppers, squash bugs, use 2 pts.

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Application: Avoid excessive application. To avoid possible injury on tender foliage, do not apply when foliage is wet or when rain or excessive humidity is expected during the next 2 days.

(2 pts.)

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FOR:

SEVIN 4F

DATE: 2/11/87

Forage Grasses and Pasture:

Armyworms, thrips. Use 2 to 3 pts. For thrip control in grasses grown for seed, high spray pressure may help penetrate into root. (3 pts.)

Garden Peas:

Colorado Potato beetle, leafhoppers, use 2 pts.

For Colorado potato beetle control apply to

weeds in fields to help prevent contamination

in processed peas. Armyworms, grasshoppers,

use 2 to 3 pts. (5 1/5 pts.)

Peanuts:

Blister beetles, use 1 to 2 pts. Alfalfa caterpillar, bean leaf beetle, cucumber beetles,
green cloverworm, Japanese beetle, leafhoppers,
three-cornered alfalfa hopper, thrips, velvet
bean caterpillar, use 2 pts. Armyworms, corn
earworm, stink bugs, webworms, use 2 to 3 pts.
To avoid possible injury on tender foliage, do
not apply when foliage is wet or when rain or
excessive humidity is expected during the next
2 days. (3 pts.)

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Potatoes, Tomatoes, Eggplants, Peppers:

Colorado potato beetle, flea beetles, leafhoppers. Use 1 to 2 pts. European corn borer

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FOR: SEVIN 4F

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fall armyworm, lace bugs, stink bugs, tarnished | plant bugs, tomato fruitworm, tomato hornworm, Use 2 to 4 pts. Cutworms (on potato, tomato, eggplant), use 4 pts. (4 pts.)

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Soybeans

Blister beetles, Mexican bean beetle - Use 1
to 2 pts. Alfalfa caterpillar, bean leaf
beetle, cucumber beetles, green cloverworm,
Japanese beetle, leafhoppers, three-cornered
alfalfa hopper, thrips, velvet bean caterpillar.
Use 2 pts. Armyworms, corn earworm, stink bugs,
webworms, use 2 to 3 pts.

Application: To avoid possible injury on tender foliage, do not apply when foliage is wet or when rain or excessive humidity is expected during the next 2 days. WARNING! Do not apply in combination with 2,4-DB herbicide (such as "Butyrac" 175 or "Butoxone" SB). (3 pts.)

O'K BY

Sugar Beets:

Armyworms, leafhoppers, webworms, use 2 to 4 pts.

Application: Do not apply within 14 days of harvest.

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FOR: SEVIN 4F

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Tobacco:

IN PLANT BEDS: Tobacco flea beetle, Use 4
tablespoonfuls per gal. or 2 pts. per 50 gals.
water and apply 6 gals. per 100 sq. yds.
Green June beetle grubs, use 1 pt. per 100 gals.
water.

Application: Apply when insects or damage appear to areas that larvae have uprooted only by sprinkling as a drench with 50-100 gals. per 100 sq. yds. May be applied before or after seeding. Avoid excessive application; plant injury may result. IN FIELDS: Budworms, flea beetles, Japanese beetles, June beetles, hornworms, use 2 to 4 pts.

Application: Use lower rate on young plants up to knee high; higher rate on mature plants, Use at least 10 gallons per acre of the prepared spray. Begin treatments when worms are small. Avoid excessive application in plant bud as injury may result. Treated fields may be entered immediately after foliage has dried. If late applications are necessary allow 3 days before priming or cutting. (4-1/2 pts.)

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FOR:

SEVIN 4F

DATE: 2/11/87

FRUIT AND NUT CROPS

Unless otherwise specified, rates are in terms of Sevin 4F per 100 gallons of dilute spray. If concentrate sprayers are used, the amount per 100 gallons should be adjusted in order to apply the same quantity of active ingredient per acre. Make first application when insects appear or damage is observed. Repeat as necessary.

See Bersen #3 Apples, Pears - East of the Rocky Mountains:

Apple Mealybug, codling moth, green apple aphid,
white apple leafhopper - Use 1 pt. Aphids (rosy
apple, wooly apple) apple maggot, bagworm, eastern
tent caterpillar, European apple sawfly,
eyespotted bud moth, fruit tree leaf roller,
green fruitworm, Japanese beetle, mites (apple
rust, pear leaf blister, pear rust), pear
psylla, periodical cicada, plum curculio, redbanded leaf roller, scales (forbes, lecanium,
oyster-shell, San Jose), tarnished plant bug,
tentiform leaf miners - Use 2 pts.

Application: When heavy aphid infestations are present, repeated applications may be necessary for optimum control. To control rosy apple aphids, apply before leaves are curled. For optimum scale control, apply when crawlers are present. Apply at 10 day intervals for apple maggot control. Applications within 30 days

O'K BY

PROPOSED CHANGE #3 >

SITE			QT./	PREHARVE INTERVAL (DAYS)	S PECIFIC DIRECTIONS
Apples Pears	Apple aphid Apple maggot Apple rust mite Apple sucker Bagworms California peatstug (pear sawliy) Eastern tent caterpillar European apple sawliy Evespotted bud moth Forces scale Fruittree leatroller Green fruitworm Gypsy moth Japanese beetile Lecanium scales Lesser appleworm	Lygus bugs Orange toritix Oystershell scale Pearleal blister mite Pear psylla Pear rust mite Periodical cicada Pium curculio Redbanged leafroller Rosy apple aphid San Jose scale Tarnished plant bug Tanistorm leafminers Woolly apple aphid Yellowheaded fireworm	42 to 1	1	OBSERVE BEE CAUTION To avoid undesired apple thinning, delay use until at least 30 days after full bloom. For psylla control, apply when eggs hatch or vound hymphs are present. To control scale insects, apply when crawlers are present
	Apple mealybug Apple aphid Codling moth	White apple leafhopper	1/2		



FOR: SEVIN 4F

DATE: 2/11/87

after bloom may also provide apple thinning. To avoid this, delay use until at least 30 days after full bloom. May cause foliar injury if used before second cover on York and McIntosh apples. Do not apply within 1 day of harvest.

Apple Thinning:

Many factors influence the degree of apple thinning obtained with Sevin. These include tree age, variety and nutrition, previous crop, pruning, degree of set, bloom, weather and use of other chemical thinners. When any of these favor reduce fruit set, caution should be observed in applying so that excessive thinning and possible yield reduction will not occur.

Use 1/2 to 1 pt. on easily-thinned varieties.

Apply for full coverage. Use 1 to 2 pts. on hard-to-thin varieties.

Application: Apply in one spray timed between 10 and 25 days after full bloom. Easily-thinned varieties include: Cortland, Grimes, Jonathan, McIntosh, Orleans, Puritan, Red Delicious, Rome Beauty, Winesap, and Yellow Newton. Difficult-to-thin varieties include Baldwin, Ben Davis, Dutchess, Early McIntosh, Golden Delicious,

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FOR:

SEVIN 4F

DATE: 2/11/87

Lady Apple, Northern Spy, Rhode Island Greening, Company of the Steele Red, Turley, Wealthy, Yellow Transparent and York Imperial.

Apricots, Nectarines, Peaches:

Revision |
4
attached

Codling moth, cucumber beetles, European earwig, fruit tree leaf roller, Japanese beetle, June beetles, lesser peach tree borer, periodical cicada, PLATYNOTA FLAVENDANA, plum curculio, red-banded leaf roller, scales (lecanium, olive, San Jose), tarnished plant bug, tussock moth. Use 2 pts.

Application: For optimum scale control, apply when crawlers are present. For lesser peach tree borer control, spray limbs and trunk thoroughly, weekly during moth flight. Do not apply within 1 day of harvest of peaches. 3 days of harvest of apricots and nectarines. (16 pts.)

Blackberries, Boysenberries, Dewberries, Logan-

berries, Raspberries:

Japanese beetle, leafhoppers, leaf rollers, raspberry aphid. Use 4 pts. per acre.

Application: A dilute spray of 100-200 gals.

water per acre is suggested. Do not apply within

O'K BY

SHEET NO. 20-26

PROPOSEP CHANGE #4

	#T		15y 100 GAL.	E-HARVEST WTERVALS (PAYS)	pecific Meetions
Peaches Apricots Nectatines	Apple pandemis Codling moth Cucumber beetles European earwig Fruntiel leafroller Gyps; moth Jacynese beetle June beetles Lacanium scales Lesser peachtree boter	Orange torrix Oriental fruit moth Peach twip borer Feriodical cicade Plum curculio Redbanded leafroller San Jose scale Tarnished plant bug Tussock moths Variegated leafroller	475	(peaches) 3 (apricots & nectarines)	For optimum scale control, apply when crawlers are present. For lesser beachtree borer control, spray kmbs and trunk (noroughly at weekly intervals during moth flight



FOR: SEVIN 4F

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DATE: 2/11/87

7 days of harvest. (4 pts.)

Blueberries:

Blueberry maggot, European fruit lecanium, fruitworms (cherry, cranberry), Japanese Beetle. Use 3 to 4 pts. per acre. A dilute spray of 125-150 gals. water per acre is suggested.

Application: Apply 3 weeks before harvest and repeat 10 days later or as necessary. (4 pts.)

Cherries, Plums, Prunes:

Aphids (black cherry, mealy plum), cherry fruit fly, cherry fruitworm, eye-spotted bud moth, fruit tree leaf roller, Japanese beetle, lesser peach tree borer, peach twig borer, plum curculio, prune leafhopper, red-banded leaf roller, scales (brown soft, forbes, lecanium, oystershell, San Jose). Use 2 pts. Codling moth, eastern tent caterpillar, orange tortrix, tussock moth. Use 1-15 pts.

O'K BY

Application: For optimum scale control, apply when crawlers are present. For lesser peach tree boter control, spray limbs and trunk thoroughly, weekly during moth flight. Do not apply within 1 day

of harvest. (12 pts.)

SHEET NO. 21 - 26

PROPOSED CHANGE #5 ٠:

CROP	}	INSECT	QUARTS SEVIN', / ./100 GAL.	PRE-HARVEST INTERVAL (DAYS)	SPECIFIC DIRECTIONS
Piums Prunes Cnerries	Codling moth Eastern tent caterpiliar	Orange tortrix Tussock moth	2,4		
	Black cherry aphid Brown soft scale Cherry fruitworm Cherry maggot European earwig Evespotted oud moth Forbes scale Fruitree leatroller Green fruitworm Gypsy moth Japanese beetle	Lecanium scales Lesser peachtree borer Mealy plum aphid Oystershell scale Peach twig borer Plum curculin Prune tealnopper Redbanded lealroller Rose chaler San Jose scale Vanegated leafroller	1	1	For optimum scale control, apply when crawlers, are present For lesser peachtree borer control, spray limbs and tree trunks thoroughly at weekly intervals during moth liight



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Cranberries:

FICA DOCHARACTERS

Cutworms, fireworms, Japanese beetle, leafhoppers.

Use 3 to 6 pts. per acre. A dilute spray of

300 gals. water per acre is suggested.

Application: Apply in late bloom and as needed at 7 to 10 day intervals. Do not apply within 1 day of harvest. (6 pts.)

Grapes:

European fruit lecanium, grape leaf folder, grape leafhoppers, grape leaf sheletonizer. Use 2 to 4 pts. per acre. Grape Berry Moth, Japanese beetle, June beetles, red-banded leaf roller. Use 4 pts. per acre. A dilute spray of 200 gals. water per acre is suggested.

<u>Application</u>: Spray just before first brood leaf folder larvae emerge from rolls and as needed for leafhoppers. (6 pts.)

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Strawberries:

Meadow spittlebug, strawberry leaf roller, strawberry weevil. Use 2 to 4 pts. per acre. A dilute spray of 100-200 gals. water per acre is suggested.

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FICA SO CHARACTERS

Specialty Uses:

ADULT MOSQUITO CONTROL:

FOR USE ON PASTURE AND RANGELANDS, NON-AGRICULTURAL LANDS SUCH AS YARDS, PARKS, RECREATION
AREAS, LOGGING CAMPS, MILITARY POSTS AND ADJACENT FORESTED LANDS OR WASTELANDS. Use 1 to
1 pt. per acre in suitable low pressure ground
equipment.

Application: Apply in sufficient spray gallonage to effectively cover area to be treated. For all methods apply in sufficient water to effectively cover area to be treated. By airplane use in 3 to 5 gals. water per acre.

For optimum control apply in early morning or evening when air is calm and adult mosquitoes are active. Use 1 qt. per 100 gals. in hydraulic sprayers, or 2 teaspoons per gallon in hand sprayers for treating backyards or other limited areas. Thoroughly cover lower shade tree foliage, shrubbery, flower beds, grass and shaded areas around buildings where adult mosquitoes congregate. Do not apply to water. Repeat at 7 to 10 day intervals or as necessary. Sevin injures Boston Ivy. Do not use on this ornamental.

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PROPOSED CHANGE #6

ADULT MOSQUITO CONTROL

For dilute-spray ground applications to trees (including shade trees, snelter belts, forests, plantations, parks and recreational areas), ornamentals, woody plants and shrubs, apply the specified dosage per 100 gallons of water. For concentrate-spray ground applications, apply the specified dosage per acre in sufficient

spray volume to provide thorough coverage. To prepare small volumes of spray, use 1 tablespoon (1/2 fluid ounce)

per gallon of water, where rates of 1 quart are indicated.

SITE	AMOUNT OF SEVIN ² / 100 GALS.	SPECIFIC DIRECTIONS
Pastures, Rangelanos, Parks,	V4 to 1 (½ to 1 tablespoonful per gallon)	DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UN TIL SPRAYS HAVE DRIED.
Recreational Areas, Logging Camps, Military Posts and		CAUTION: May kill shrimp and crabs. Do not use in areas where these are important resources
Adiacent Forested		OBSERVE BEE CAUTION
lands or Wastelands		Treat shrubbery and areas where adult mosquitoes congregate. Treat when adult mosquitoes are active in early mornings or fate evenings. Repeat at 7 to 10 day intervals.
		Use ½ to ½ quart per 100 gallons in mistplowers, and 1 quart per acre in low pressure ground sprayers.
Ī	25	For residual control in subtropical regions apply 4 gallons of prepared spray per 2000 square leet of surface area. Repeat in 3 to 6 months or when necessary.



FOR:

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FICA COCHARACTERS

See

Ants, Chinch Bugs, Earwigs, Fall Armyworms,

Fleas, Leafhoppers, Mosquitoes, Sod Webworms

(LAWN MOTHS), MILLIPEDES - Apply 1/4 pt. in 15

to 20 gals. water for each 500 to 20 gals. water for each 500 sq. ft. of established lawn area.

> Application: Use garden hose sprayers or pressure type equipment and apply full water volume to insure good penetration of turf. For best results, mow lawn and apply immediately after rain or watering. Repeat in 2 to 3 weeks if necessary.

See Geograf change # 8 attached

Ornamental Plants, Flowers, Shrubs and Shade Trees:

Rose, Carnation, Gladiolus, Zinnia, Chrysanthemum, Lilac, Arborvitae, Juniper, Hydrangea, Azalea, Elm, Maple, Oak, Dogwood, Birch and Pines:

(Do not use on Boston Ivy) - Apply 1 qt. per 100 gals. water (2 level teaspoonfuls per gal.) when insects or their damage appear. weekly or as needed to control: Apple aphid, bagworm, birch leaf miner, blister beetles, boxelder bug, boxwood leaf miner, elm leaf aphid, elm leaf beetle, flea beetles, gypsy

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PROPOSED CHANGE

LAWNS AND RECREATIONAL AREAS

For control of certain turigrass pests, apply the recommended rates in sufficient spray volume for thorough coverage and turif thatch penetration. Where a dosage range is indicated, use the higher rate on large pest populations advanced instars and dense

vegetation. Repeat treatment as necessary. DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.

	ĺ		AMOUNT OF SEVIN			
SITE	INSECT		FL. 0Z./ 1000 SQ. FT.	OUARTS ACRE	SPECIFIC DIRECTIONS	
Turi grasses	Ants Armyworm Centipedes Chiggers Cutworms Earwigs Essex skipper European chafer Fall armyworm Fiery skipper Grasshoppers Green June Deetle grub	June beeties Lealnoppers Lucerne moth Millipeoes Mosquitoes (aoults) Sowbugs Spittlebugs Spittlebugs Spittlebugs Ticks Yellowstriped armyworm	11/2 to 3	2 10 4	For Armyworm, Cutworm and Fall Armyworm Control. Do not irrigate treated areas following insecticide application. For Green June Beetle Grub Control: Make applications when grubs are leeding near the soil surface. Water or irrigate turf grasses soon after treatment.	
	Chinch bugs Sod Webwarm (lawn moths)		4 4 to 6	6 to 8	For Chinch Bug Control. Treat entire grass area rather than just damaged areas. Irrigation of tur grass area before treatment will aid in penetration of insecticide into turl grass. For Sod Webworm Control. Do not irrigate treated areas following insecticide application.	
	Biuegrass billoug European crane fly Fleas White grubs (such as Japanese peetle, Chater bee and Phyllophaga spp. larvae)	:	6	8	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 turf grasses thoroughly 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 to early September, or as recommended b local Agricultural Extension Service agents. Water or irrigate turf grasses thoroughly soon after treatment.	

IMPORTED FIRE ANT CONTROL

SITE	AMOUNT OF SEVINE	SPECIFIC DIRECTIONS
Lawns, Cemeteries and Recreational Areas (including turf, golf courses, and parks) Pastures Rangeland Forested Lands and Wasteland	1½ ouans/ 100 galions or 1½ tablespoons/ gallon	Apply a total of 2 pallons of the diluted solution over the surface of each mound or at least 1 quartiper 6 inches of mound planter using a bucket, can or other appropriate equipment. Thoroughly wet mound and surrounding area to a 4 ft. diameter (12 sc. ft.). Do not disturb mounds prior to treatment. Pour solution from a height of about three feet to give sufficient force to break mound apex and flow into ant tunnets. For best results apply in cool weather, 65-80 degrees F, or in early morning or late evening hours. Repeat application if mound activity resumes after 10 days. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness. DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.



PROPOSED CHANGE

TREES AND ORNAMENTALS

For control of certain insects on trees, ornamentals, woody plants and shrubs, apply the recommended amount in 100 gallons of water. Use hand or power-operated sprayer to wet leaves and twigs to the dripping point.

Do not use on Boston ivy, Virginia creeper and maidenhair fern. During early season it may also injure Virginia and sand pines.

	MODEL		SEVIN' L	CRECIFIC DIDECTIONS
	INSECT		100 GALS.	SPECIFIC DIRECTIONS
Ants Apple aphid Armyworm Azalea leafminer Bagworms Grich leafminer Blister beetle boxelder dug Boxwood leafminer Erowntail moth Cankerworms Catalpa sphinx Chiggers Cutworms Cypress tip moth Eastern spruce gall adelgic Eim leaf aphid Eim leaf aphid Eim leaf aphid Eim spanworm Erophyro mites European pine shoot motr. Fall armyworm Freb deetles Fulter fose beetle Gall midges Gall wasps Greenstriped madieworm	Grasshoppers Gypsy moth Frackberry rupplegall maker Holly bud moth Holly bud moth Holly leafminer Jackpine budworm Japanese beelle Jeftrey pine needieminer June beetles Lace bugs Leafhoppers Leafroliers Locust bofer Maple leafcutter Mealybugs Mimosa webworm Nantucket pine tip moth Oak leafminers Oak leafminers Oak seaf skeletonizer Oak moth Oakworm complex Orangestriped oakworm Orange tortix Periodical cicaoa Pine topper	Pine sawily Pine spittlebug Pitch pine tip moth Plant bugs Poinsettia hornworm Psyllios Puss cateroillar Redhumbed oakworm Rose abhid Rose chaler Rosestug Saddleo prominent Sawilies (exposed) Scale insects Sowbugs Spiney elim caterpillar Springtails Spruce needleminer Subtropical pine tip moth Tent caterpillars Thrips (exposed) Ticks Tree hoppers Wainut caterpillar Western nemlock looper Willow leaf beeties Yellow poplar weevil		Observe plant response precautions. Apply dilute sprays to obtain thorough coverage of upper and lower leaf surfaces. To control scale insects, treat trunks, stems and lwips in addition to plant foliage. For optimum worm control, treat when it early instars. Addition of a sticker may improve tesiqual control. Applications for control of maple leafcuiter on sugar maple should be made when larvae are in 2nd instar after mining and as cases are being formed. DO NOT ALLOW PUBLIC USE OF TREATED AREAS DURING APPLICATIONS OR UNTIL SPRAYS HAVE DRIED.
Balsam twig aphid Cooley spruce gall adelgid Douglas-fir Tussock moth	Spruce buoworm Western spruce buoworm		1 10 2	Use the higher rate when large larvae or heavy populations are present.
Ips engrave: beetles Mountain pine beetle Roundneaged pine be Spruce beetle Western pine beetle Erm Bark Beetle	elle		16	Effective for peetie control or as a protective treatment. Apply 1 gallon of spray per 50 square feet of bank prior to beetie fliph; or host-tree attack. Treat tree trunks from ground fevel up, until trunk planeter is less than 5 inches. Repeat treatments as needed. Apply approximately 20-30 gallons of spray mixture for each 50 feet of elm free for thorough coverage of all back surfaces on trunks, limbs and twigs.





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But of Brogoed Change At 8 attachetto B. 24 moth, Japanese beetle, June beetles, lace
bugs, leafhoppers, leaf rollers, mealybugs,
mimosa webworm, oak leaf miners, orange tortrix,
periodical cicada, plant bugs, puss caterpillars
psyllids, rose aphid, roseslug, scale insects,
tent caterpillars, thorn bugs, thrips (exposed)
willow leaf beetles.

POULTRY PEST CONTROL:

Chickens, Ducks, Game Birds, Geese, Pigeons, Turkeys:

DIRECT SPRAY MIST ON BIRDS: Control chicken mite, fleas, lice and northern fowl mite by (1) MISTING WITH ELECTRIC FOG MACHINE: Mix 10 fl. ozs. in 1 gal. of spray. Use 14 gal. per 1,000 hens in cages, on litter or on slatted floor. Repeat in 4 weeks if necessary, or (2) SPRAY WITH KNAPSACK OR CYCLINDER TYPE COMPRESSED AIR SPRAYERS: Mix 6 fl. ozs. in 5 gals. of spray. Use 1 gal. per 100 hens in cages on litter or on slatted floor. Repeat in 4 weeks if necessary. Direct mist spraying for chicken mites and fleas is a supplement to spraying roosts and buildings for control of these pests. SPRAY ROOSTS AND BUILDINGS with conventional power spray or knapsack equipment. For bedbugs, chicken mite and fleas - use 1 qt. per 25 gals. water. For fowl

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ticks, use 1 gal. per 25 gals. water. Spray 1 to 2 gal. per 1,000 sq. ft. of wall, bedding, litter or roost surfaces. Force spray into cracks and crevices, repeat as needed.

NOTE: This pesticide is to be sold ONLY in this original unbroken package.

DISCLAIMER: Buyer assumes all risks of use, storage or handling not in strict accordance with directions given herewith.

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