

PM 13

279-3129

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US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.
279-3129

DATE OF ISSUANCE
MAR 8 1993

TERM OF ISSUANCE
Until Reregistration

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME OF PESTICIDE PRODUCT
Thiodan WSB Insecticide

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

FMC Corporation
Agricultural Chemical Group
1735 Market Street
Philadelphia, PA 19103

1665436107
18 P

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA sec. 3(c)(5) or FIFRA sec. 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment:
 - a. Add the phrase, "EPA Registration No. 279-3129".
 - b. Add the statement, "Get medical attention.", to the IF INHALED and IF ON SKIN statements of practical treatment.

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

- c. Revise the sixth sentence beginning with, "During mixing, loading...", under Hazards to Humans and Domestic Animals statement as follows:

Applicators must wear a long sleeve shirt, trousers, unlined waterproof gloves made of natural rubber or neoprene, full foot covering (such as shoes or boots), head covering (such as a hat), and a pesticide mask or respirator jointly approved by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part 11 for protection against endosulfan. Mixers and/or loaders must wear a chemical resistant apron and goggles or face shield in addition to all of the protective equipment specified for applicators.

- d. Under Environmental Hazards revise the statement, "Do not apply directly to water or wetlands." to read, "Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark."
- e. The following use sites must be deleted from the labeling since the residue data to support these uses have not been submitted.

Almonds, Macadamia nuts, Mustard (oil & condiment crop), Peas (succulent), Pigeon peas, Rapeseed, Raspberries, and Turnip greens

- f. Under Strawberries - Northwest Use Only, add the application interval as 4 days.
- g. In the limitations appearing under the crops, Tomatoes (Field and Greenhouse) and Ornamentals (Field and Greenhouse), delete the statement, "In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protection against endosulfan.", since wearing a MSHA/NIOSH approved respirator is required for all applications, not just those made in greenhouses.

3. Submit five copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

4. The Confidential Statement of Formulas dated September 23, 1991 for the basic and alternate formulations containing polyvinal alcohol (PVA) film from Mitsui Plastics Inc. are acceptable. The PVA fil from other manufacturers are not acceptable since their inerts (or components) are not cleared for

use on food crops.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

George T. LaRocca
Product Manager 13
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Enclosure

PH13 279-3129

4045

CODE

NET WEIGHT

THIODAN^R WSB INSECTICIDE

For Agricultural or Commercial Use Only

EPA Reg. No. 279-1380AA EPA Est. 279-

| Active Ingredient: | By Wt. |
|--|---------------|
| *Endosulfar: (Hexachlorohexahydro- methano-2,4,3-benzodioxathiepin 3-oxide)..... | 49.6% |
| Inert Ingredients:..... | 50.4% |
| | <u>100.0%</u> |

*Thiodan

KEEP OUT OF REACH OF CHILDREN

DANGER-POISON

PELIGRO

See Other Panels for Additional Precautionary Information.

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicado ampliamente.

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician or Poison Control Center immediately. If possible, vomiting should be induced under medical supervision. Drink one or two (1 - 2) glasses of water and induce vomiting by giving one (1) ounce of syrup of ipecac, if available, or by touching the back of the throat with a finger. Do not induce vomiting or give anything by mouth to a person who is unconscious or convulsing.

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

If on skin: Remove contaminated clothing and wash skin with soap and water.

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

Note to Physician: Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation or through contact with skin. It may cause convulsions. There is no specific antidote. Diazepam I.V. is the drug of choice. Barbituric acid derivatives such as Phenobarbital may be used additionally. A neuromuscular blocking agent may be used if convulsions persist. This type of drug may be used only if complete control of respiration can be maintained. Epinephrine derivatives are absolutely contraindicated.

ACCEPTED with COMMENTS in EPA Letter Dated

MAR 8 1993

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 279-3129

For Emergency Assistance Call 716-735-3765

PRECAUTIONARY STATEMENTS
Hazards to Humans (& Domestic Animals)

Danger

Fatal if swallowed or inhaled. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe vapor. During mixing, loading and application of this product wear unlined waterproof gloves and a pesticide mask or respirator jointly approved by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH) for pesticide application under the provision of 30 CFR Part 11 for protection against endosulfan. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. Wash thoroughly with soap and water after handling and before smoking or eating. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds, and other wildlife. Birds feeding on treated areas may be killed. Do not apply directly to water or wetlands. Due to the risk of runoff and drift, do not apply within a distance of 300 feet of lakes, ponds, streams, and estuaries. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab and other aquatic life are important resources. This product must not be used in areas where impact on threatened endangered species is likely. Contact your State Fish and Game Agency before applying this product. Apply this product only as specified on this label.

This pesticide is toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimal bee activity, usually between late evening and early morning.

DIRECTIONS FOR USE

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

Do not apply this product through any type of irrigation system.

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. When mixing, loading, and applying this product wear unlined waterproof gloves and a MSHA/OSHA approved pesticide mask or respirator.

RE-ENTRY

Do not enter treated areas without appropriate protective clothing for 24 hours.

Protective clothing means, at least, a hat or other suitable head covering, a long sleeved shirt and long legged trousers or a coverall type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks.

Because certain states may require more restrictive re-entry intervals for various crops treated with this product, such as the 48 hour re-entry interval established by California, consult your State Department of Agriculture for further information.

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. Inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure. An example of such information is given under written warnings. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information:

DANGER

Area treated with endosulfan on (insert date). Do not enter without appropriate protective clothing for 24 hours (insert State Department of Agriculture's re-entry interval, if more restrictive).

In case of accidental exposure to pesticide spray or dust, wash the skin thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If in eyes, flush with plenty of water. If inhaled, go to an area where the pesticide has not been applied. Get medical attention if needed.

STORAGE AND DISPOSAL

PESTICIDE STORAGE:

Do not store in or around the home.

Keep out of reach of children and animals. Store in original containers only. Store in a cool dry place and avoid excess heat. Do not store at temperatures below 32°F (0°C). Rough handling may cause breakage, especially at low temperatures. Allow to warm above 50°F (10°C) for normal use. Do not allow inner bags to become wet during storage. Do not handle inner bag with wet hands or wet gloves. Mix product as needed.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC collect: (716) 735-3765.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter, or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

PESTICIDE DISPOSAL:

70445

Pesticide wastes are acutely toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

When all water soluble bags are used, the outer package should be clean and may be disposed of in a sanitary landfill, by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. If the outer container contacts formulated product in any way, it must be triple rinsed with clean water. Add rinsate to the spray tank and dispose of the outer package as described above.

GENERAL INSTRUCTIONS

Not for use or storage in or around the home.

Do not treat areas while unprotected humans or domestic animals are present in the treatment area.

The product, a wettable powder formulation of the insecticide endosulfan, is individually packaged in one-pound units in a translucent water soluble bag contained within an outer package. Do not open the water soluble bags. Do not allow the inner bag to become wet before adding to spray or nurse tank. Do not handle the inner bag with wet hands or wet gloves. Rough handling may cause breakage. Do not store at temperatures below 32°F (0°C). Allow to warm above 50°F (10°C) before normal use. Cooler water temperatures increase the time needed for the inner bag to dissolve completely.

Thiodan WSB insecticide is intended for dilution with water for spray application. Do not use strainers finer than 50 mesh size. Determine the number of water soluble bag(s) to make up necessary spray suspension. Use a minimum spray volume of 5 gallons of water per acre. Fill the spray or nurse tank 1/2 full with water. Open the outer wrapper of this product and immediately dump required contents into spray tank. Allow the water soluble bag(s) to dissolve completely. Start hydraulic or mechanical agitation. Air agitation is not recommended. Mix thoroughly to fully disperse and suspend the wettable powder. Fill the spray tank with the required amount of water. Maintain agitation during storage in nurse or supply tank or application.

Apply Thiodan WSB when insects appear or feeding is noticed. Repeat the application as necessary to maintain control. Thiodan WSB may be applied by both ground and aerial equipment. Use sufficient water to obtain full coverage.

) Mix as needed; do not store diluted material.

Apply the listed amount per acre when insects first appear and repeat as required, unless otherwise noted, to maintain effective control. Use in sufficient water for thorough coverage of crop foliage. Coverage of upper and lower leaf surfaces is essential for good control. For ground application, apply recommended amount of pesticide in a minimum of 10 gallons of water per acre on vegetable or row crops. Observe use limitations; do not apply more than the allowable number of bags per acre per year or the number of allowable applications per year. If insect control is required beyond the following use patterns supplement the control program with other suitable pesticides.

When applying this material by aircraft, mix the recommended amount with water to provide a minimum of 5 gallons of finished spray per acre on vegetable and field crops, unless otherwise noted, and a minimum of 20 gallons of finished spray per acre on fruit and nut trees and on vines. When applying 4 bags or more of Thiodan WSB, mix in a minimum of 20 gallons of water to ensure adequate dispersion of the product.

NOTE: Each bag contains 1.0 pound of formulated product which is equivalent to 0.5 pound active ingredient.

Do not plant root crops other than carrots, potatoes, sweet potatoes and sugar beets as follow-up crops. Observe days interval between last application and harvest indicated by number in () following the crop name.

)

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ALFALFA (Grown for Forage) (21)

| Insects Controlled | Rate of Application | Method of Application |
|---|---------------------|---|
| Meadow Spittlebug | 1 bag per 2 acres | Apply one week after eggs begin to hatch or when first small masses of froth are produced in the crowns of the plant which is usually about the time the alfalfa is 4 to 6 inches tall. Apply in a minimum of 10 gallons of water per acre by ground or 5 gallons of water per acre by air. |
| <p>Do not graze or cut forage within 21 days of treatment. Do not apply more than once per cutting. Do not make more than 3 applications per year. Do not exceed a maximum of 0.75 lb. active ingredient (i.e., 1 1/2 bags) per acre per year.</p> | | |

ALMONDS

| Insects Controlled | Rate of Application | Method of Application |
|---|----------------------|---|
| Peach Twig Borer | 4 to 5 bags per acre | Apply during popcorn, pink or petal fall stage for control of early season infestation. Use in a minimum of 200 gallons of water per acre dilute or in 40 gallons per acre concentrate. For areas less than one acre, use 1 bag per 100 gallons of water. |
| <p>Treated hulls may be fed to livestock and dairy animals. Do not graze livestock on orchard crops or grasses in treated areas. Do not make more than one application per year. Do not exceed a maximum of 2.5 lbs. active ingredient (i.e., 5 bags) per acre per year.</p> | | |

APPLES (21)

| Insects Controlled | Rate of Application | Method of Application |
|---|--|---|
| <p>Aphids (including Apple Aphid, Rosy Apple Aphid, Woolly Apple Aphid) Apple Rust Mite Green Fruitworm Tarnished Plant Bug Tentiform Leafminers White Apple Leafhopper (first generation)</p> | <p>1 bag per 100 gallons or a maximum of 5 bags per acre</p> | <p>Applications made at pink and/or petal fall provide best control of Tarnished Plant Bug and Green Fruitworm. For best control of first generation White Apple Leafhopper, apply when nymphs first appear on leaves. If necessary, prior to petal fall, use 3 bags per 200 gallons to control Apple Aphids and Rosy Apple Aphids. For control of Tentiform Leafminers, make first application as soon as moth flight begins. A second application should be made 10 days later.</p> |

Do not feed pomace from treated apples to livestock.
Do not feed cull fruits to animals or allow livestock to graze in treated orchards.
Do not make more than 2 applications during the fruiting period.
Do not make more than 3 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

APRICOTS (21), NECTARINES (21), PEACHES (21)

| Insects Controlled | Rate of Application | Method of Application |
|---|---|---|
| Peachtree Borer Lesser Peachtree Borer | 3 bags per 200 gallons; <u>West Coast</u> - 2 to 3 bags per 100 gals.; <u>Southeastern States</u> - 3 to 5 bags per 100 gallons | Best control is obtained with a single application post-harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs. |

Do not feed cull fruits to animals or allow livestock to graze in treated orchards.
Do not make more than 2 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

APRICOTS (30), NECTARINES (30), PEACHES (30)

| Insects Controlled | Rate of Application | Method of Application |
|---|--|--|
| Aphids (including Black Cherry Aphid, Black Peach Aphid, Green Peach Aphid, Rusty Plum Aphid) Catfacing insects (Stink Bug type) Green Fruitworm Peach Silver Mite Peach Twig Borer | 1 bag per 100 gallons or a maximum of 4 to 5 bags per acre; <u>West Coast</u> - do not use more than 6 bags per acre | Make applications when insects appear or feeding is noticed. |

Do not feed cull fruits to animals or allow livestock to graze in treated orchards.
Do not make more than 2 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

ARTICHOKES (7)

| Insects Controlled | Rate of Application | Method of Application |
|---|---------------------|--|
| Aphids (including Artichoke Aphid, Green Peach Aphid) Artichoke Plume Moth Whitefly | 2 bags per acre | Make applications when insects appear or feeding is noticed. Apply in a minimum of 20 gallons of water per acre by ground and in a minimum of 10 gallons of per acre water by air. |

Do not make more than 2 applications per year.
Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 4 bags) per acre per year.

BARLEY, OATS, RYE, WHEAT

| Insects Controlled | Rate of Application | Method of Application |
|---|---------------------|---|
| Army Cutworm Cereal Leaf Beetle (Illinois, Indiana, Michigan and Ohio only) | 1 bag per acre | Apply when small larvae are readily found in the field. For aerial application, use a minimum of 5 gallons of water per acre. |
| Aphids | 2 to 3 bags acre | Make applications when insects appear or feeding is noticed. |

Do not apply after heads begin to form.
Do not feed treated forage to livestock.
Do not make more than 2 applications per year.
Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year.

BEANS, Succulent and Dry (except Lima Beans) (3) and SOUTHERN FIELD PEAS (Succulent type, including Black-eyed Peas, Crowder Peas and Southern Peas) (3)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|---|
| Black Bean Aphid Bean Leaf Skeletonizer Cowpea Curculio Cucumber Beetles Flea Beetles Green Stink Bug Leafhoppers Mexican Bean Beetle | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. For control of Cowpea Curculio, make 3 applications at 5-day intervals starting when the pods are 1/2 inch long. |
| Aphids Armyworms Western Bean Cutworm Whitefly | 2 bags per acre | |

Do not feed treated threshings or allow livestock to graze in treated fields.
 Do not use on Lima Beans that are to be removed from the field for processing.
 Do not make more than 3 applications per year.
 Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

BLUEBERRIES

| Insects Controlled | Rate of Application | Method of Application |
|--------------------|------------------------|--|
| Blueberry Bud Mite | 3 bags per 300 gallons | Apply immediately after harvest and repeat 6 to 8 weeks later. |

Do not apply after buds are well formed.
 Do not make more than 2 applications per year.
 Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

BROCCOLI (including Chinese Broccoli) (7), BRUSSEL SPROUTS (14), CABBAGE (including Chinese [Napa] Cabbage) (7), CAULIFLOWER (14)

| Insects Controlled | Rate of Application | Method of Application |
|--|---------------------|--|
| Cabbage Aphid Cabbage Looper Cross-striped Cabbageworm Diamondback Moth larvae Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers Stink Bugs Armyworms Cutworms Whitefly | 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

CARROTS (7)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|---|
| Green Peach Aphid Leafhoppers | 1 to 2 bags per acre | Make application when insects appear or feeding is noticed. |
| Armyworms Flea Beetles Whitefly | 2 bags per acre | |
| Do not use tops for food or feed. Do not make more than one application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year. | | |

CELERY (4)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|---|
| Green Peach Aphid Cabbage Looper Leafhoppers | 1 to 2 bags per acre | Make application when insects appear or feeding is noticed. |
| Armyworms Flea Beetles Whitefly | 2 bags per acre | |

Do not make more than one application per year.
Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year.

CELERY (7)

| Insects Controlled | Rate of Application | Method of Application |
|--------------------|---------------------|--|
| Green Peach Aphid | 1 bag per acre | Make applications when insects appear or feeding is noticed. |

Do not make more than 2 applications per year.
Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year.

) CHERRIES (21)

| Insects Controlled | Rate of Application | Method of Application |
|---|--|---|
| Peachtree Borer Lesser Peachtree Borer | bags per 100 gallons; <u>West Coast:</u> 2 to 3 bags per 200 gals. | Thoroughly wet all bark from ground to scaffold limbs. |
| Black Cherry Aphid Green Fruitworm Plum Rust (Nursery) Mite | 1 bag per 100 gallons or 4 to 5 bags per acre | Make applications when insects appear or feeding is noticed. |
| <u>Pacific Northwest only:</u> Eyespotted Bud Moth Fruittree Leafroller | | For Bud Moth control, apply at "popcorn" stage. For Leafroller control, apply during pre-pink stage of growth. |
| <u>Michigan only:</u> Mineola Moth | 2 bags per 100 gallons | Apply in the delayed dormant period. |
| <p>Do not feed cull fruits to animals or allow livestock to graze in treated orchards.</p> <p>Do not make more than 2 applications per year.</p> <p>Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

) CHERRY, PEACH, PLUM NURSERY STOCK DIP

| Insects Controlled | Rate of Application | Method of Application |
|--------------------|-----------------------|--|
| Peachtree Borer | 4 bags per 40 gallons | Mix Thoroughly. Immerse trees so that the roots and crowns are well covered above the grafting bud scar. |

Wear rubber gloves during the dipping operation.
Plant immediately, or dry before returning stock to storage.

) CITRUS (Non-Bearing Trees and Nursery Stock)

| Insects Controlled | Rate of Application | Method of Application |
|--------------------|---|--|
| Citrus Aphid | 1 bag per 200 gallons or a maximum of 5 bags per acre | Make applications when insects appear or feeding is noticed. |

Do not apply to bearing trees or trees that will bear fruit within twelve months.
Do not make more than 2 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

COLLARDS (21)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------------|--|
| Aphids Cabbage Looper Diamondback Moth larvae Fall Armyworm Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers | 3 to 4 bags per 2 acres | Make application when insects appear or feeding is noticed. |
| Whitefly | 2 bags per acre | |

Do not make more than one application per year.
Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per
acre per year.

COTTON

| Insects Controlled | Rate of Application | Method of Application |
|--|-------------------------|---|
| Aphids | 2 to 3 bags per 2 acres | Make applications when insects appear or feeding is noticed. For control of aphids, thorough coverage is important. |
| Boll Weevil | 1 to 3 bags per acre | |
| Bollworm Cabbage Looper Cotton Leafperforator Cotton Leafworm Fleahoppers Lygus Bugs Stink Bugs Tobacco Budworm | 2 to 3 bags per acre | |
| Thrips | 3 bags per acre | |

Applications may be made using ground or aerial application equipment.
 The higher rate should be used under heavy pest pressure.
 Do not apply after bolls open.
 Do not graze dairy or meat animals in treated fields.
 Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

) CUCUMBERS (2), MELONS (2), PUMPKINS (2), SUMMER & WINTER SQUASH (2)

| Insects Controlled | Rate of Application | Method of Application |
|---|----------------------|---|
| Aphids Cucumber Beetles Melonworm Pickworm Rindworm (on watermelons) Squash Beetle Squash Bug Squash Vine Borer Striped Flea Beetle | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. For Squash Vine Borer control, apply weekly to flower buds, stems and vines beginning when moths first appear. |
| Cabbage Looper Omnivorous Leafroller Whitefly | 2 bags per acre | |
| Do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

EGGPLANT (1)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|--|
| Blister Beetle Colorado Potato Beetle Flea Beetles Green Peach Aphid Green Stink Bug | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| Whitefly | 2 bags per acre | |
| Do not make more than 2 applications per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year. | | |

) **FILBERTS (1)**

| Insects Controlled | Rate of Application | Method of Application |
|--|---|--|
| Filbert Aphid Filbert Bud Mite Filbert Leafroller | 1 bag per 100 gallons or 3 to 4 bags per acre | Make applications when insects appear or feeding is noticed. |
| <p>Do not graze livestock on orchard crops or grasses in treated areas. Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

) **GRAPES (7)**

| Insects Controlled | Rate of Application | Method of Application |
|--|---|--|
| Grape Leafhopper Grape Phylloxera (leaf form) Rose Chafer | 1 bag per 100 gallons or 2 to 3 bags per acre | Make applications when insects appear or feeding is noticed. |
| <p>Do not use on Baca No. 1, Baca Noir, Seibel 7053 (Chancellor), Seibel 8375 (Colobel), Seibel 13053 (Cascade) or Concord varieties as severe injury is likely to occur. Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

KALE (21)

| Insects Controlled | Rate of Application | Method of Application |
|--|-----------------------|---|
| Cabbage Flea Beetle Harlequin Bug Imported Cabbageworm | 3 bags per 2 acres | Make application when insects appear or feeding is noticed. |
| <p>Do not make more than one application per year. Do not exceed a maximum of 0.75 lb. active ingredient (i.e., 1 1/2 bags) per acre per year.</p> | | |

LETTUCE (14)

| Insects Controlled | Rate of Application | Method of Application |
|--|---------------------|--|
| Cabbage Looper Diamondback Moth larvae Green Peach Aphid Imported Cabbageworm Leafhoppers Armyworms Whitefly | 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| <p><u>On Head Lettuce:</u> Do not make more than 3 applications after thinning. Remove wrapper leaves at harvest. <u>On Leaf Lettuce:</u> Do not make more than 2 applications per year. Do not feed crop refuse to livestock. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

MACADAMIA NUTS (1)

| Insects Controlled | Rate of Application | Method of Application |
|--------------------------|------------------------|--|
| Southern Green Stink Bug | 2 bags per 100 gallons | Make applications when insects appear or feeding is noticed. |

Do not graze livestock on orchard crops or grasses in treated areas.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

MUSTARD GREENS (21)

| Insects Controlled | Rate of Application | Method of Application |
|--|-------------------------|---|
| Aphids Cabbage Looper Diamondback Moth larvae Fall Armyworm Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers Whitefly | 3 to 4 bags per 2 acres | Make application when insects appear or feeding is noticed. |

Do not make more than one application per year.
Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year.

MUSTARD (Oil & Condiment Crops) (28)

| Insects Controlled | Rate of Application | Method of Application |
|---|-------------------------|---|
| Aphids Cabbage Looper Corn Earworm Cutworms Diamondback Motl. larvae Fall Armyworm Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers Seedpod Weevils | 1 to 2 bags per acre | Spray when pests first appear using a minimum of 10 gallons of water per acre with ground equipment and 5 gallons of water per acre by air. A properly timed second application may be made if necessary to maintain control. |
| Do not graze treated fields or feed treated forage or threshings to livestock. Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 4 bags) per acre per year. | | |

PEARS (7)

| Insects Controlled | Rate of Application | Method of Application |
|--|--|--|
| Green Fruitworm Tarnished Plant Bug | 1 bag per 100 gallons or 4 to 5 bags per acre | Make applications at white bud or petal fall when insects appear or feeding is noticed. |
| Pear Psylla | 5 bags per acre | Apply in a minimum of 20 gallons of water for aerial application or in 300 gallons of water for dilute application. Apply when adults are first observed or nymphs are small and repeat to maintain control. |
| Pear Rust Mite Conspere Stink Bug (foliar treatment) | 1 bag per 100 gallons or 4 to 5 bags per acre | Make applications when insects appear or feeding is noticed. Stink Bugs must be wet by spray to obtain control. |
| Conspere Stink Bug (Soil treatment) | 1 bag per 100 gallons; 200 to 400 gallons per acre | Apply to orchard floor and around trees prior to bloom. |
| Pear Leaf Blister Mite | 1 to 2 bags per 200 gals. | Apply as a post harvest or dormant treatment. |

Do not feed cull fruits to animals or allow livestock to graze in treated orchards.
 Do not make more than 2 applications per year.
 Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

NOTE: Aerial application may not result in satisfactory control and should only be employed if impossible to apply by ground.

PEAS (Seed Crop Only) (1)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|--|
| Pea Aphid Pea Weevil | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| <p>Use only on peas to be harvested by combine. Do not feed treated vines or threshings to livestock or allow livestock to graze in treated fields. Do not make more than 2 applications per year. Do not exceed a maximum of 1.5 lbs. active ingredient (i.e., 3 bags) per acre per year.</p> | | |

PEAS, SUCCULENT (1)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|--|
| Pea Aphid Pea Weevil | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| <p>Use only on peas to be harvested by combine. Do not feed treated vines or threshings to livestock or allow livestock to graze in treated fields. Do not make more than 3 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 4 bags) per acre per year.</p> | | |

) PECANS

| Insects Controlled | Rate of Application | Method of Application |
|--|------------------------------|---|
| Black Pecan Aphid Pecan Nut Casebearer Spittlebug | 3 bags per 200 gallons | Make applications when insects appear or feeding is noticed. For Casebearer, apply when eggs of first generation appear on the tips of the young nuts. Another application may be required after the second generation of eggs is deposited. For Spittlebug, apply when first leaves are half grown and repeat as required. |
| Pecan Leaf Phylloxera | 2 to 3 bags per 200 gals. | Apply when nymphs appear and before they are enclosed in plant tissue. For high populations, use the higher rate. |
| <p>Do not apply after shuck split. Do not graze livestock on orchard crops or grasses in treated areas. Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

PEPPERS (1)

| Insects Controlled | Rate of Application | Method of Application |
|--|---------------------|--|
| Flea Beetles Green Peach Aphid Hornworms Pepper Maggot | 1 bag per acre | Make applications when insects appear or feeding is noticed. |
| <p>Do not make more than 2 applications per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year.</p> | | |

) PEPPERS (4)

| Insects Controlled | Rate of Application | Method of Application |
|---|----------------------|--|
| Armyworms Flea Beetles Green Peach Aphid Hornworms Leafhoppers Pepper Maggot | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| Whitefly | 2 bags per acre | |
| Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 4 bags) per acre per year. | | |

) PIGEON PEAS (5)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|---|
| Cowpea Curculio Leafhoppers Pod Borers | 1 to 2 bags per acre | Apply when 50% or more of the crop is in bloom and repeat one week later. |
| Whitefly | 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| Do not feed treated vines to livestock or allow livestock to graze in treated fields. Do not make more than 2 applications per year. Do not exceed a maximum of 1.5 lbs. active ingredient (i.e., 3 bags) per acre per year. | | |

) **PINEAPPLE (For Fresh Market Only) (7)**

| Insects Controlled | Rate of Application | Method of Application |
|---|----------------------|---|
| Pineapple Fruit Mite | 3 to 4 bags per acre | Make applications when insects appear or feeding is noticed. Apply at intervals of 7 to 10 days, if necessary, particularly during the 40 day period of blooming. |
| <p>Do not feed treated forage or pineapple by-products to livestock. Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

) PLUMS (7), PRUNES (7)

| Insects Controlled | Rate of Application | Method of Application |
|--|---|---|
| Fruitix - Leafroller (<u>Pacific Northwest Only</u>) | 1 bag per 100 gallons or 4 to 5 bags per acre | Apply during pre-pink stage of growth when insects appear or feeding is noticed. |
| Aphids (including Hop Aphid, Leafcurl Plum Aphid, Thistle Aphid) Plum Rust (Nursery) Mite | | For control of aphids, apply when eggs hatch during pre-bloom or petal fall. Summer applications should be made before leaves curl. |
| Peach Twig Borer | 1 bag per 100 gallons or 4 to 5 bags per acre | Make applications when insects appear or feeding is noticed. |
| Lesser Peachtree Borer | 3 bags per 200 gallons or 4 to 5 bags per acre | Apply spray to thoroughly wet the trunk and main branches. |
| Peachtree Borer | 3 bags per 200 gallons or 4 to 5 bags per acre; <u>West Coast</u> - 2 to 3 bags per 200 gals. or 4 to 5 bags per acre | Spray thoroughly to cover all bark areas from ground to scaffold limbs. |

Do not allow livestock to graze on orchard crops or grasses in treated areas.
Do not make more than 2 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

) POTATOES (1)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------------|---|
| Aphids Armyworms Colorado Potato Beetle Green Stink Bug Leaffooted Bug Plant Bugs Potato Flea Beetles Potato Leafhopper Potato Tuberworm Threelined Potato Beetle | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| European Corn Borer Potato Psyllid | 3 to 4 bags per 2 acres | |
| False Chinch Bug Whitefly | 2 bags per acre | |
| Do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

) RAPESEED [CANOLA] (Oil Crop) (28)

| Insects Controlled | Rate of Application | Method of Application |
|---|----------------------|---|
| Aphids Cereal Leaf Beetle Cucumber Beetle Cutworms Diamondback Moth larvae Flea Beetles Lygus Bugs Seedpod Weevils | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| Mites Whitefly | 2 bags per acre | Spray when pests first appear. For mite control, coverage of upper and lower leaf surfaces is essential for good control. A properly timed second application may be made if necessary to maintain control. |

Do not allow livestock to graze in treated fields or feed treated forage or hreshings to livestock.

Do not make more than 2 applications per year.

Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 4 bags) per acre per year.

RASPBERRIES

| Insects Controlled | Rate of Application | Method of Application |
|--------------------|---------------------|--|
| Rose Stem Girdler | 1 bag per acre | Apply when adult beetles begin activity, about 2 to 3 weeks before bloom. Soak raspberry canes, by applying to run off, using at least 100 gallons of dilute mixture per acre. |

Do not make more than one application per year.

Do not exceed a maximum of 0.5 lb. active ingredient (i.e., 1 bag) per acre per year.

) **SAPFLOWER**

| Insects Controlled | Rate of Application | Method of Application |
|---|---------------------|--|
| Green Peach Aphid Whitefly | 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| <p>Do not apply after flower heads open. Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 4 bags) per acre per year.</p> | | |

SPINACH (21)

| Insects Controlled | Rate of Application | Method of Application |
|--|-------------------------|---|
| Armyworms Crown Mite Flea Beetles Green Peach Aphid Leafhoppers | 3 to 4 bags per 2 acres | Make application when insects appear or feeding is noticed. |
| Whitefly | 2 bags per acre | |
| <p>Do not make more than one application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 bags) per acre per year.</p> | | |

STRAWBERRIES (4)

| Insects Controlled | Rate of Application | Method of Application |
|--|--------------------------------|---|
| Meadow Spittlebug Strawberry Aphid Tarnished Plant Bug Whitefly | 2 bags per acre | Make applications when insects appear or feeding is noticed. Do not reapply within 15 days or more than twice during a 35 day period when fruit is present. |
| Cyclamen Mite | 4 bags per acre in 400 gallons | Make applications when insects appear or feeding is noticed. Thoroughly wet the foliage, stem and crown of the plant. For multiple applications, do not apply at intervals less than 35 days when fruit is present. |

Do not make more than 3 applications per year.
Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

STRAWBERRIES - Northwest Use Only

| Insects Controlled | Rate of Application | Method of Application |
|--|------------------------|--|
| Garden Symphylan (aids in reducing damage) | 2 bags per 100 gallons | Mix thoroughly. Dip entire plant. When immersing bundles of plants, make certain any trapped air is forced out to assure thorough wetting of entire plant. |

Wear rubber gloves during the dipping operation.
Drain and allow plants to dry before setting them out in the field.

) SUGAR BEETS (30)

| Insects Controlled | Rate of Application | Method of Application |
|--|----------------------|---|
| Green Peach Aphid Meadow Spittlebug | 1 to 2 bags per acre | Make application(s) when insects appear or feeding is noticed. Make one or two applications per year as needed for control. |
| Sugar Beet Webworm Whitefly | 2 bags per acre | |
| <p>Do not feed treated tops to livestock. Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 4 bags) per acre per year.</p> | | |

) SUNFLOWERS (1)

| Insects Controlled | Rate of Application | Method of Application |
|--|---------------------|--|
| Sunflower Moth | 2 bags per acre | Make applications when insects appear or feeding is noticed. Make the first application at the onset of bloom. Allow 7 days between repeat applications. |
| <p>Do not feed treated forage to livestock. Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

) SWEET CORN (Fresh Vegetable Use Only) (1)

| Insects Controlled | Rate of Application | Method of Application |
|-----------------------------|---------------------|--|
| Corn Leaf Aphid Whitefly | 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| Corn Earworm | 3 bags per acre | Apply when silks first appear and continue until they begin to dry. Allow 5 days between applications. |

Do not apply to Sweet Corn to be processed.

Do not feed treated forage or ensilage to livestock or allow livestock to graze in treated fields.

Do not make more than 3 applications per year.

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

) SWEET POTATOES (1)

| Insects Controlled | Rate of Application | Method of Application |
|---|--|---|
| Sweet Potato Flea Beetle Sweet Potato Weevil | 1 bag per acre | Make applications when insects appear or feeding is noticed. For flea beetle control, begin applications shortly after transplanting or as soon as flea beetles appear. For Sweet Potato Weevil control, apply in sufficient water for complete coverage. Applications may be made to transplants in the nursery and/or in the field. Repeat applications may be made as necessary. For Sweet Potato Weevil control in a clean up program, apply at a rate of 4 bags per acre to the soil under the sweet potato nursery beds and to the area immediately surrounding the nursery beds. Do not place the seed tubers directly on the ground treated with Thiodan ^R . |
| Whitefly | 2 bags per acre | Make applications when insect activity or feeding is noticed. |
| Banded Cucumber Beetle larvae (aids in control) South Central States and Puerto Rico Only) | 2 to 4 bags per acre broadcast or 2 to 4 bags per 3 acres on a 16 inch band over the row (48 inch row spacing) | Work into the soil to a depth of approximately 3 inches. Treatment should be made just prior to plant set. |

Do not feed cull potatoes to livestock or allow livestock to graze in treated fields.

Do not make more than 3 applications per year.

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

) TOBACCO (5)

| Insects Controlled | Rate of Application | Method of Application |
|---|--|--|
| Aphids (including Green Peach Aphid, Tobacco Aphid) Budworm Cabbage Looper Flea Beetles Hornworms | <u>Seed Bed</u> : 1 bag per 100 gallons | Make applications when insects appear or feeding is noticed. Apply about 6 gallons of finished spray per 100 square yards. |
| Green June Bug larvae | <u>Plant Bed</u> : 1 bag per 200 gallons | Make application when insects appear or feeding is noticed. Drench at a rate of 1 gallon per square yard. |
| Aphids (including Green Peach Aphid, Tobacco Aphid) Budworm Cabbage Looper Flea Beetles Green June Bug larvae Hornworms | <u>Field</u> : 1 to 2 bags per acre | Make applications when insect activity or feeding is noticed. |
| Stink Bugs | <u>Field</u> : 2 to 3 bags per 100 gallons | |
| Do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

) TOMATOES (Field & Greenhouse) (2)

| Insects Controlled | Rate of Application | Method of Application |
|--|---------------------------------------|--|
| Aphids Blister Beetles Colorado Potato Beetle Flea Beetles Tomato Hornworm Webworm (<u>California only</u>) | 1 to 2 bags per acre | Make applications when insects appear or feeding is noticed. |
| Cabbage Looper Stink Bugs Tomato Fruitworm Tomato Russet Mite Whitefly Yellowstriped Armyworm | 2 bags per acre | |
| Whitefly | 1 bag per 100 to 200 gallons of water | |

In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protection against endosulfan.
 Do not make more than 6 applications per year.
 Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

TURNIP GREENS (21)

| Insects Controlled | Rate of Application | Method of Application |
|---|-----------------------|---|
| Aphids Cabbage Looper Diamondback Moth larvae Fall Armyworm Flea Beetles Harlequin Bug Imported Cabbageworm Leafhoppers | 3 bags per 2 acres | Make application when insects appear or feeding is noticed. |
| <p>Do not apply to turnips grown for roots. Do not make more than one application per year. Do not exceed a maximum of 0.75 lb. active ingredient (i.e., 1 1/2 bags) per acre per year.</p> | | |

WALNUTS

| Insects Controlled | Rate of Application | Method of Application |
|--|-------------------------|--|
| Walnut Aphid | 3 to 4 bags per acre | Make applications when insects appear or feeding is noticed. |
| <p>Do not apply after husk split. Do not graze livestock on orchard crops or grasses in treated areas. Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

**COMMERCIALLY GROWN ORNAMENTALS
ORNAMENTAL PLANTS**

LEATHERLEAF FERN (Leather Holly Fern)

| Insects Controlled | Rate of Application | Method of Application |
|---|-----------------------|---|
| Leatherleaf Fern Borer | 1 bag per 100 gallons | Begin treatment when first larval feeding is observed in the mid-vein area at the base of the leaflets. Repeat at intervals of 2 to 3 weeks as necessary. |
| Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

ORNAMENTALS (Greenhouse and Out-of-Doors)

| Insects Controlled | Rate of Application | Method of Application |
|--|------------------------|--|
| Aphids Cyclamen Mite Rose Chafer Whitefly | 1 bags per 100 gallons | Make applications when insects appear or feeding is noticed. |
| <p>On chrysanthemums, best results will be obtained if applied before plants flower.</p> <p>Do not apply to "Bonnafon Deluxe", "Fred Shoesmith", and "White Knight" chrysanthemums as injury may result.</p> <p>Do not use on Birch trees.</p> <p>In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protection against endosulfan.</p> <p>Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.</p> | | |

) ORNAMENTAL TREES AND SHRUBS

DOGWOOD, LILAC

| Insects Controlled | Rate of Application | Method of Application |
|--|------------------------------|---|
| Dogwood Borer Lilac Borer | 1 to 2 bags per 100 gals. | Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to the ground level. |
| Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

DOUGLAS FIR (Grown for Ornamentals, Nursery Stock or Christmas Trees) -
Pacific Northwest Only

| Insects Controlled | Rate of Application | Method of Application |
|--|--------------------------|---|
| Aphids Cooley Spruce Gall Adelgid Douglas Fir Needle Midge | 1 bag per 100 gallons | Make applications when insects appear or feeding is noticed. For control of gall adelgid, apply when white cottony tufts appear. For control of needle midge, apply in late April or early May just before buds open. |
| Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

) PINES (Austrian, Jack, Red, Scotch, White)

| Insects Controlled | Rate of Application | Method of Application |
|---|------------------------|--|
| Zimmerman Pine Moth | 3 bags per 200 gallons | Apply in mid-April and again, if necessary, in late fall. Thoroughly wet bark and main stem, especially where branches join main stem. |
| Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

SHADE TREES (except Birch), SHRUBS

| Insects Controlled | Rate of Application | Method of Application |
|---|-----------------------|--|
| Aphids | 1 bag per 100 gallons | Make applications when insects appear or feeding is noticed. |
| Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

SPRUCE (New England Area Only)

| Insects Controlled | Rate of Application | Method of Application |
|---|-----------------------|---|
| Spruce Gall Aphid | 1 bag per 100 gallons | Apply in late April or early May when aphids are present but before galls are formed. |
| Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year. | | |

) TAXUS

| Insects Controlled | Rate of Application | Method of Application |
|--------------------|------------------------|---|
| Taxus Bud Mite | 1 bag per 100 gallons | Make 3 to 5 applications beginning in mid-May. Thoroughly spray foliage, twigs and bark. |
| Black Vine Weevil | 2 bags per 100 gallons | Spray thoroughly and drench the soil under the plants. Apply when the weevils first appear and repeat in 14 days. |

Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 bags) per acre per year.

Dealers Should Sell in Original Packages Only.

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