

JUL 22 1994

Ms. Bethany G. Hulcy
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

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Dear Ms. Hulcy:

Subject: Amendment - Revised Labeling
Gowan Endosulfan 50 WSB
EPA Registration No. 10163-130
Your Letter Dated December 29, 1993

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable provided that you make the labeling changes indicated below prior to release for shipment of product bearing the amended labeling.

1. Under the Directions for Use of Water Soluble Bags, add the following statements regarding strainer mesh size and tank mixing.
 - a. For strainers: Do not use strainers finer than 50 mesh size.
 - b. For tank mixing: When mixing Gowan Endosulfan 50 WSB with other products, observe all precautions and limitations on the labels of each product.

In the future when submitting amendments associated with label changes, please submit complete labeling including labeling for WSB.

Submit five copies of your final printed labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

George T. LaRocca
Product Manager 13
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure

GOWAN ENDOSULFAN 50 WSB Insecticide

JUL 22 1994

For Agricultural or Commercial Use Only

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
10163-130

Active Ingredient: Endosulfan:	
Hexachlorohexahydromethano-2,4,3-benzodioxathiepir, 3-oxide	50%
Inert Ingredients:	50%
	Total 100%

**KEEP OUT OF REACH OF CHILDREN
DANGER POISON
PELIGRO**

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

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 glasses of water and induce vomiting by giving one (1) ounce of syrup of ipecac, if available, or by touching back of throat with 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.

For 24-hour Emergency Assistance Call CHEMTREC at (800) 424-9300.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND 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. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- A respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)

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Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statement: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be modified as specified in the WPS.

EPA Reg. No. 10163-130
EPA Est. No. 67545-AZ-1

GOWAN COMPANY
P.O. BOX 5569
Yuma, AZ 85366-5569

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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 to areas where surface water is present, or to intertidal areas below the mean high water mark. 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 minimum 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 in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls over long-sleeved shirt and pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

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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 put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

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: Pesticide wastes are acutely hazardous. 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 at the nearest EPA regional office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

See supplemental label for DIRECTIONS FOR USE IN CALIFORNIA.

DIRECTIONS FOR USE OF WATER SOLUBLE BAGS

Packets containing Gowan Endosulfan 50 WSB are water soluble. After opening outer bag, avoid exposing inner bags to moisture, and do not allow bags to become wet prior to adding to the spray tank. Do not handle inner bag with wet hands. Reseal outer bag in a manner that protects remaining packets from moisture. To prepare the spray mixture, drop the required number of unopened packets, as determined under RECOMMENDATIONS, into the spray tank while filling with water to the desired level (whenever possible direct the fill water over the top of the packets to increase the rate of solubility). Where dosages of Gowan Endosulfan 50 WSB are expressed as fractions of pounds, prepare the tank mix load to the lower of the nearest whole pound. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within approximately three to five minutes from the time they were added to the spray tank. Once the packets have completely dissolved, add other chemicals following conventional mixing order practices. Tank-mix solutions containing Boron will affect the solubility of the water soluble film. When preparing tank-mixes containing Boron, add the correct amount of Gowan Endosulfan 50 WSB to the spray tank first. Make sure that the water soluble packets are completely dissolved. Add Boron containing solutions to the spray tank last.

CHEMIGATION STATEMENT

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

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GENERAL INSTRUCTIONS

Not for use or storage in or around the home.

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 listed crops, unless otherwise noted. 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. 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 sufficient water to provide a minimum of 1 gallon 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 pounds or more, mix in a minimum of 10 gallons of water.

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.

ALFALFA (Grown for Forage) (21): Meadow Spittlebug: Use 1/2 lb. per acre. Apply one week after eggs begin to hatch or when first small masses of froth are produced in the crown of the plant which is usually about the time the alfalfa is 4 to 6 inches tall. Apply in a minimum of 10 gals. of water per acre by ground or 2 gals. of water per acre by air.

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 lbs.) per acre per year.

APPLES (21): 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): Use 1 lb. per 100 gals. or a maximum of 5 lbs. per acre. 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 1 1/2 lbs. per 100 gals. 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.

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 lbs.) per acre per year.

APRICOTS (21), NECTARINES (21), PEACHES (21): Peachtree Borer, Lesser Peachtree Borer: Use 1 1/2 lbs. per 100 gals.; *West Coast*: Use 1 to 1 1/2 lbs. per 100 gals.; *Southeastern States*: Use 3 to 5 lbs. per 100 gals. 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 lbs.) per acre per year.

APRICOTS (30), NECTARINES (30), PEACHES (30): Aphids (including Black Cherry Aphid, Black Peach Aphid, Green Peach Aphid, Rust Plum Aphid), Catfacing Insects (Stink Bug type), Green Fruitworm, Peach Silver Mite, Peach Twig Borer: Use 1 lb. per 100 gals. or a maximum of 4 to 5 lbs. per acre; *West Coast*: Do not use more than 6 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not feed cull fruits to animals nor 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 lbs.) per acre per year.

ARTICHOKES (7): Aphids (including Artichoke Aphid, Green Peach Aphid): Use 1 1/2 to 2 lbs. per acre. Artichoke Plume Moth, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed. Apply in a minimum of 20 gals. of water per acre by ground and in a minimum of 10 gals. of water per acre 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 lbs.) per acre per year.

BARLEY, OATS, RYE, WHEAT: Army Cutworm: Use 1 lb. per acre. For aerial application, apply in 2 gals. of diesel fuel oil per acre. Cereal Leaf Beetle (Illinois, Indiana, Michigan and Ohio only): Use 1/2 to 1 lb. per acre. Apply when small larvae are readily found in the field. For aerial application, use a minimum of 1 to 2 gals. of water per acre. Aphids: Use 1 to 1 1/2 lbs. per acre. Make application 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 lbs.) 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): Black Bean Aphid, Bean Leaf Skeletonizer, Cowpea Curculio, Cucumber Beetles, Flea Beetles, Green Stink Bug, Leafhoppers, Mexican Bean Beetle: Use 1 to 2 lbs. per acre. Aphids, Armyworms, Western Bean Cutworm, Whitefly: Use 2 lbs. 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.

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 lbs.) per acre per year.

BLUEBERRIES: Blueberry Bud Mite: Use 3 lbs. per 300 gals. 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 lbs.) per acre per year.

BROCCOLI (7), BRUSSEL SPROUTS (14), CABBAGE (7), CAULIFLOWER (14): Cabbage Aphid, Cabbage Looper, Cross-striped Cabbageworm, Diamondback Moth Larvae, Flea Beetles, Harlequin Bug, Imported Cabbageworm, Leafhoppers, Stink Bugs: Use 1 1/2 to 2 lbs. per acre. Armyworms, Cutworms, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 4 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

CARROTS (7): Green Peach Aphid, Leafhoppers: Use 1 to 2 lbs. per acre. Armyworms, Flea Beetles, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

CELERY (4): Green Peach Aphid, Cabbage Looper, Leafhoppers: Use 1 to 2 lbs. per acre. Armyworms, Flea Beetles, Whitefly: Use 2 lbs. per acre. Make applications 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 lbs.) per acre per year.

CELERY (7): Green Peach Aphid: Use 1 lb. 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 lbs.) per acre per year.

CHERRIES (21): Peachtree Borer, Lesser Peachtree Borer: Use 1 1/2 lbs. per 100 gals.; *West Coast*: 1 to 1 1/2 lbs. per 100 gals. Thoroughly wet all bark from ground to scaffold limbs. Black Cherry Aphid, Green Fruitworm, Plum Rust (Nursery) Mite: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications when insects appear or feeding is noticed. *Pacific Northwest Only*: Eyespotted Bud Moth, Fruittree Leafroller: Use 1 lb. per 100 gals or 4 to 5 lbs. per acre. For bud moth control apply at "popcorn" stage. For leafroller control, apply during pre-pink stage of growth.

Michigan Only: Mineola Moth: Use 2 lbs. per 100 gals. Apply in the delayed dormant period.

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 lbs.) per acre per year.

NURSERY STOCK DIP; CHERRY, PEACH, PLUM: Peachtree Borer: Use 4 lbs. per 40 gals. Mix thoroughly. Immerse trees so that the roots and crowns are covered well above the grafting bud scar.

Plant immediately or dry before returning stock to storage.

CITRUS (Non-bearing Trees and Nursery Stock): Citrus Aphid: Use 1/2 lb. per 100 gals. or a maximum of 5 lbs. 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 lbs.) per acre per year.

COLLARDS (21): Aphids, Cabbage Looper, Diamondback Moth Larvae, Fall Armyworm, Flea Beetles, Harlequin Bug, Imported Cabbageworm, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make applications 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 lbs.) per acre per year.

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COTTON: Aphids: Use 3/4 to 1 1/2 lbs. per acre. Boll Weevil: Use 1 to 3 lbs. per acre. Bollworm, Cabbage Looper, Cotton Leafperforator, Cotton Leafworm, Fleahoppers, Lygus Bugs, Stink Bugs, Tobacco Budworm: Use 2 to 3 lbs. per acre. Thrips: Use 3 lbs. per acre. Make applications when insects appear or feeding is noticed. For control of aphids, through coverage is important.

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 meat or dairy animals in treated fields. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

CUCUMBERS (2), MELONS (2), PUMPKINS (2), SUMMER and WINTER SQUASH (2): Aphids, Cucumber Beetles, Melonworm, Pickleworm, Rindworm (on watermelons), Squash Beetle, Squash Bug, Squash Vine Borer, Striped Flea Beetle: Use 1 to 2 lbs. per acre. Cabbage Looper, Omnivorous Leafroller, Whitefly: Use 2 lbs. 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.

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

EGGPLANT (1): Blister Beetles, Colorado Potato Beetles, Flea Beetles, Green Peach Aphids, Green Stink Bugs: Use 1 to 2 lbs. per acre. Whitefly: Use 2 lbs. 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 lbs.) per acre per year.

FILBERTS (1): Filbert Aphid, Filbert Bud Mite, Filbert Leafroller: Use 1 lb. per 100 gals. or 3 to 4 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

GRAPES (7): Grape Leafhopper, Grape Phylloxera (leaf form), Rose Chafer: Use 1 lb. per 100 gals. or 2 to 3 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

KALE (21): Cabbage Flea Beetle, Harlequin Bug, Imported Cabbageworm: Use 1 1/2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 1 application per year. Do not exceed a maximum of 0.75 lb. active ingredient (i.e., 1 1/2 lbs.) per acre per year.

LETTUCE (14): Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Armyworms, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

On Head Lettuce: Do not exceed 3 applications after thinning. Remove wrapper leaves at harvest.

On Leaf Lettuce: 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 lbs.) per acre per year.

MUSTARD GREENS (21): Aphids, Cabbage Looper, Diamondback Moth Larvae, Fall Armyworm, Flea Beetles, Harlequin Bug, Imported Cabbageworm, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 1 application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 lbs.) per acre per year.

PEARS (7): Green Fruitworm, Tarnished Plant Bug: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications at white bud or petal fall when insects appear or feeding is noticed. Pear Psylla: Use 5 lbs. per acre. Apply in a minimum of 10 gals. of water for aenal application or in 300 gals. of water for dilute application. Apply when adults are first observed or nymphs are small and repeat to maintain control. Pear Rust Mite, Consperse Stink Bug (foliar treatment): Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications when insects appear or feeding is noticed. Stink bugs must be wet by spray to obtain control. Consperse Stink Bug (soil treatment): Use 1 lb. per 100 gals.; 200 to 400 ga's. per acre. Apply to orchard floor and around trees prior to bloom. Pear Leaf Blister Mite: Use 1/2 to 1 lb. per 100 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 lbs.) 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): Pea Aphid, Pea Weevil: Use 1 to 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

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PECANS: Black Pecan Aphid, Pecan Nut Casebearer, Spittlebug: Use 1 1/2 lbs. per 100 gals. 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 are deposited. For spittlebug, apply when first leaves are half grown and repeat as required. Pecan Leaf Phylloxera: Use 1 to 1 1/2 lbs. per 100 gals. Apply when nymphs appear and before they are enclosed in plant tissue. For high populations, use the higher rate.

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 lbs.) per acre per year.

PEPPERS (1): Flea Beetles, Green Peach Aphid, Homworms, Pepper Maggot: Use 1 lb. 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 lbs.) per acre per year.

PEPPERS (4): Armyworms, Flea Beetles, Green Peach Aphid, Homworms, Leafhoppers, Pepper Maggot: Use 1 to 2 lbs. per acre. Whitefly: Use 2 lbs. 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 2.0 lbs. active ingredient (i.e., 4 lbs.) per acre per year.

PINEAPPLE (For Fresh Market Only) (7): Pineapple Fruit Mite: Use 3 to 4 lbs. 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.

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 lbs.) per acre per year.

PLUMS (7), PRUNES (7): Fruittree Leafroller (Pacific Northwest Only): Use 1 lb. per 100 gals. or 4 to 5 lbs. 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: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. 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: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications when insects appear or feeding is noticed. Lesser Peachtree Borer: Use 1 1/2 lbs. per 100 gals. or 4 to 5 lbs. per acre. Apply spray to thoroughly wet the trunk and main branches. Peachtree Borer: Use 1 1/2 lbs. per 100 gals. or 4 to 5 lbs. per acre; *West Coast*: 1 to 1 1/2 lbs. per 100 gals. or 4 to 5 lbs. 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 lbs.) per acre per year.

POTATOES (1): Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leafhoppered Bug, Plant Bugs, Potato Flea Beetles, Potato Leafhopper, Potato Tuberworm, Threelined Potato Beetle: Use 1 to 2 lbs. per acre. European Corn Borer, Potato Psyllid: Use 1 1/2 to 2 lbs. per acre. False Chinch Bug, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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

SAFFLOWER: Green Peach Aphid, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

SPINACH (21): Armyworms, Crown Mites, Flea Beetles, Green Peach Aphid, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 1 application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 lbs.) per acre per year.

STRAWBERRIES (4): Meadow Spittlebug, Strawberry Aphid, Tarnished Plant Bug, Whitefly: Use 2 lbs. 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: Use 4 lbs. per acre in 400 gals. 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 lbs.) per acre per year.

STRAWBERRIES (Northwest Use Only): Garden Symphylan (aid in reducing damage): Use 2 lbs. per 100 gals. 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. Drain and allow plants to dry before setting them out in the field.

SUGAR BEETS (30): Green Peach Aphid, Meadow Spittlebug: Use 1 to 2 lbs. per acre. Sugar Beet Webworm: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make application(s) when insects appear or feeding is noticed. Make 1 or 2 applications per year as needed for control.

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 lbs.) per acre per year.

SUNFLOWERS (1): Sunflower Moth: Use 2 lbs. 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.

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 lbs.) per acre per year.

SWEET CORN (Fresh Vegetable Use Only) (1): Corn Leaf Aphid, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed. Corn Earworm: Use 3 lbs. 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 lbs.) per acre per year.

SWEET POTATOES (1): Sweet Potato Flea Beetle, Sweet Potato Weevil: Use 1 lb. 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 lbs. 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 endosulfan. Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed. Banded Cucumber Beetle Larvae (aids in control) (South Central States and Puerto Rico Only): Use 2 to 4 lbs. per acre broadcast, or 2/3 to 1 1/3 lbs. per acre 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 lbs.) per acre per year.

TOBACCO (5): Aphids (including Green Peach Aphid, Tobacco Aphid), Budworm, Cabbage Looper, Flea Beetles, Hornworms: *Seed Bed:* Use 1 lb. per 100 gals. Make applications when insects appear or feeding is noticed. Apply about 6 gals. of finished spray per 100 square yards. Green June Bug Larvae: *Plant Bed:* Use 1/2 lb. per 100 gals. Make applications when insects appear or feeding is noticed. Drench at a rate of 1 gal. per square yard. Aphids (including Green Peach Aphid, Tobacco Aphid), Budworm, Cabbage Looper, Flea Beetles, Green June Bug Larvae, Hornworms: *Field:* Use 1 to 2 lbs. per acre. Stink Bugs: *Field:* Use 2 to 3 lbs. per 100 gals. Make applications when insect activity or feeding is noticed.

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

TOMATOES (Field and Greenhouse) (2): Aphids, Blister Beetles, Colorado Potato Beetle, Flea Beetles, Tomato Hornworm, Webworm (California Only): Use 1 to 2 lbs. per acre. Cabbage Looper, Stink Bugs: Use 1 1/2 to 2 lbs. per acre. Tomato Fruitworm, Tomato Russet Mite, Whitefly, Yellowstriped Armyworm: Use 2 lbs. per acre. Whitefly: Use 1 lb. per 100 to 200 gals. of water. Make applications when insects appear or feeding is noticed.

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

WALNUTS: Walnut Aphid: Use 3 to 4 lbs. per acre. Make applications when insects appear or feeding is noticed. 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 lbs.) per acre per year.

COMMERCIALY GROWN ORNAMENTALS

Ornamental Plants

LEATHERLEAF FERN (LEATHER HOLLY FERN): Leatherleaf Fern Borer: Use 1 lb. per 100 gals. (1 tablespoon per gal.). 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.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

ORNAMENTALS (Greenhouse, and Out-of-Doors): Aphids, Cyclamen Mite, Rose Chafer, Whitefly: Use 1 lbs. per 100 gals. (1 tablespoon per gal.). Make applications when insects appear or feeding is noticed.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. On chrysanthemums, best results will be obtained if applied before plants flower. Do not apply to "Bonnafon Deluxe", "Food Shoemith", and "White Knight" chrysanthemums as injury may result. Do not use on Birch trees. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

Ornamental Trees and Shrubs

DOGWOOD, LILAC: Dogwood Borer, Lilac Borer: Use 1 to 2 lbs. per 100 gals. (1 to 2 tablespoons per gal.). Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to the ground level.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

DOUGLAS FIR (Grown for Ornamentals, Nursery Stock or Christmas Trees) Pacific Northwest Only: Aphids, Cooley Spruce Gall Adelgid, Douglas Fir Needle Midge: Use 1 lb. per 100 gals. (1 tablespoon per gal.) 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.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

PINES (Austrian, Jack, Red, Scotch, White): Zimmerman Pine Moth: Use 1 1/2 lbs. per 100 gals. (1 1/2 tablespoons per gal.) Apply in mid-April and again, if necessary, in late fall. Thoroughly wet bark and main stem, especially where branches join main stem.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

SHADE TREES (Except Birch), SHRUBS: Aphids: Use 1 lb. per 100 gals. (1 tablespoon per gal.) Make applications when insects appear or feeding is noticed.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

SPRUCE (New England Area Only): Spruce Gall Aphid: Use 1 lb. per 100 gals. (1 tablespoon per gal.) Apply in late April or early May when aphids are present but before galls are formed.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

TAXUS: Taxus Bud Mite: Use 1 lb. per 100 gals. (1 tablespoon per gal.) Make 3 to 5 applications beginning in mid-May. Thoroughly spray foliage, twigs, and bark. Black Vine Weevil: Use 2 lbs. per 100 gals. (2 tablespoons per gal.)

Spray thoroughly and drench soil under the plants. Apply when the weevils first appear and repeat in 14 days.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

NOTICE ON CONDITION OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

REV 12/93

CALIFORNIA SUPPLEMENTAL LABEL

PROCEDURES FOR REDUCING RISK OF CONTAMINATION OF AQUATIC ECOSYSTEMS

FOR CROP USES LISTED ON THE PRODUCT LABEL

Endosulfan may be a source of contamination in aquatic ecosystems as a result of run-off from agricultural land due to discharge of irrigation water or during periods of heavy rainfall.

To minimize the chance of aquatic impact, the following conditions must be met to allow endosulfan applications:

DIRECTIONS FOR USE IN CALIFORNIA (General)

IN ADDITION TO SPECIFIC INSTRUCTIONS UNDER DIRECTIONS FOR USE ON THE PRINCIPAL LABEL, THE FOLLOWING CONDITIONS MUST ALSO BE FOLLOWED FOR USE IN CALIFORNIA:

1. Do not apply this product to fields during irrigation or for 72 hours following an irrigation.
} Do not apply this product through any type of irrigation system.
3. Do not apply more than 1.5 lbs. a.i. per acre per application or more than 3.0 lbs. a.i. per acre per season. (Orchard crops and strawberries exempted on rate/acre/application restriction.)
4. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.
5. Do not apply by ground or air within a distance of 300 feet of natural bodies of water including lakes, ponds, streams and estuaries.

FOR DRIFT CONTROL

1. All application equipment should be properly maintained and calibrated using appropriate carriers.
2. Do not make aerial or ground applications during temperature inversions.
3. Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Do not discharge at a height of more than 10 feet above the crop or target.
} For aerial application a positive shutoff system shall be in place to control flow of liquid to spray nozzles as follow: Each individual nozzle shall be equipped with a check valve and the flow controlled by a suckback device or a boom pressure release device; or each nozzle shall be equipped with a positive action valve.
5. For aerial applications, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor vortices. The working boom length must not exceed 75% of wing span or rotor diameter.
6. Aircraft boom pressure shall not exceed 40 pounds per square inch.
7. Aircraft nozzles shall be equipped with orifices directed backward parallel to the horizontal axis of the aircraft in flight.
8. Aircraft nozzles shall not be equipped with any device or mechanism which would cause a sheet, cone, fan, or similar type dispersion of the discharged material except as otherwise provided.
9. Fixed wing aircraft and helicopters operating in excess of 60 mph shall be equipped with jet nozzles having an orifice not less than 1/16 inch in diameter (D-4 or larger).
10. Helicopters operating at 60 mph or less shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter. A number 46 or equivalent whirlplate may be used.
11. For ground applications, equipment other than handguns shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter or larger. Boom nozzles shall be operated at a boom pressure not to exceed 30 pounds per square inch.

BEST AVAILABLE COPY

ACCEPTABLE SITES FOR ENDOSULFAN APPLICATION

1. FIELDS, WITH NO DRAINS, HAVING CONTAINMENT THROUGH BERMS (able to hold irrigation water and normal rainwater), LEVEES AND NON-DRAINING CIRCULATION SYSTEMS.
2. FIELDS WITH DRAINS, BUT DRAINAGE FLOWS TO SUMP, FARM POND, EVAPORATION POND, OR RECIRCULATION SYSTEM WITHOUT DRAINAGE (uncontrollable overflow acceptable, e.g., 10 or 100 year flood). Only grower maintained recirculation systems without drainage are acceptable.
3. FIELDS WITH SURFACE DRAINS THAT NATURALLY FLOW ONTO PASTURELAND OR FALLOW FIELDS THAT HAVE NO CHanneled DRAINAGE AND ARE AT LEAST 300 FEET LONG.

UNACCEPTABLE SITES FOR ENDOSULFAN APPLICATION

1. FIELDS DRAINING DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, LAKES, PONDS, MARSHES, BAYS, ESTUARIES, OR THE OCEAN.
2. FIELDS DRAINING INTO SURFACE DRAINAGE DITCHES OR CANALS THAT FLOW DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, LAKES, PONDS, MARSHES, BAYS, ESTUARIES OR THE OCEAN.
3. ANY AND ALL FIELDS WITH SURFACE DRAINAGE PATTERNS IN THE MOSS LANDING DRAINAGE SYSTEM HAVING MAIN ARTERIES THAT DRAIN INTO THE ELKHORN SLOUGH (northern portion of Monterey County).
4. ANY AND ALL FIELDS WITH DRAINAGE PATTERNS IN THE SAN DIEGO CREEK DRAINAGE SYSTEM HAVING) MAIN ARTERIES THAT DRAIN INTO NEWPORT BAY.

ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED LABEL ARE TO BE FOLLOWED.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

JUL 22 1994

Ms. Bethany G. Hulcy
Gowan Company
P.O. Box 5569
Yuma, AZ 85366-5569

300 / 452577
17

Dear Ms. Hulcy:

Subject: Amendment - Revised Labeling
Gowan Endosulfan 50 WSB
EPA Registration No. 10163-130
Your Letter Dated December 29, 1993

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable provided that you make the labeling changes indicated below prior to release for shipment of product bearing the amended labeling.

1. Under the Directions for Use of Water Soluble Bags, add the following statements regarding strainer mesh size and tank mixing.
 - a. For strainers: Do not use strainers finer than 50 mesh size.
 - b. For tank mixing: When mixing Gowan Endosulfan 50 WSB with other products, observe all precautions and limitations on the labels of each product.

In the future when submitting amendments associated with label changes, please submit complete labeling including labeling for WSB.

Submit five copies of your final printed labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

George T. LaRocca
Product Manager 13
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure

GOWAN ENDOSULFAN 50 WSB
Insecticide

JUL 22 1994

For Agricultural or Commercial Use Only

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
10163-130**Active Ingredient:** Endosulfan:

Hexachlorohexahydromethano-2,4,3-benzodioxathiepin 3-oxide

Inert Ingredients:

58%

50%

Total 100%

KEEP OUT OF REACH OF CHILDREN
DANGER POISON
PELIGRO

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

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 glasses of water and induce vomiting by giving one (1) ounce of syrup of ipecac, if available, or by touching back of throat with 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.

For 24-hour Emergency Assistance Call CHEMTREC at (800) 424-9300.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND 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. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)**Applicators and other handlers must wear:**

- Coveralls over long-sleeved shirt and long pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- A respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statement: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-8)), the handler PPE requirements may be modified as specified in the WPS.EPA Reg. No. 10163-130
EPA Est. No. 67545-AZ-1**GOWAN COMPANY**
P.O. BOX 5569
Yuma, AZ 85366-5569

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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 to areas where surface water is present, or to intertidal areas below the mean high water mark. 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 minimum 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 in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls over long-sleeved shirt and pants
- Waterproof gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

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 put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills:

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: Pesticide wastes are acutely hazardous. 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 at the nearest EPA regional office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

See supplemental label for DIRECTIONS FOR USE IN CALIFORNIA.

DIRECTIONS FOR USE OF WATER SOLUBLE BAGS

Packets containing Gowan Endosulfan 50 WSB are water soluble. After opening outer bag, avoid exposing inner bags to moisture, and do not allow bags to become wet prior to adding to the spray tank. Do not handle inner bag with wet hands. Reseal outer bag in a manner that protects remaining packets from moisture. To prepare the spray mixture, drop the required number of unopened packets, as determined under RECOMMENDATIONS, into the spray tank while filling with water to the desired level (whenever possible direct the fill water over the top of the packets to increase the rate of solubility). Where dosages of Gowan Endosulfan 50 WSB are expressed as fractions of pounds, prepare the tank mix load to the lower of the nearest whole pound. Operate the agitator while mixing. Depending on the water temperature and the degree of agitation, the packets should be completely dissolved within approximately three to five minutes from the time they were added to the spray tank. Once the packets have completely dissolved, add other chemicals following conventional mixing order practices. Tank-mix solutions containing Boron will affect the solubility of the water soluble film. When preparing tank-mixes containing Boron, add the correct amount of Gowan Endosulfan 50 WSB to the spray tank first. Make sure that the water soluble packets are completely dissolved. Add Boron containing solutions to the spray tank last.

CHEMIGATION STATEMENT

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

GENERAL INSTRUCTIONS

Not for use or storage in or around the home.

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 listed crops, unless otherwise noted. 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. 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 sufficient water to provide a minimum of 1 gallon 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 pounds or more, mix in a minimum of 10 gallons of water.

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.

ALFALFA (Grown for Forage) (21): Meadow Spittlebug: Use 1/2 lb. per acre. Apply one week after eggs begin to hatch or when first small masses of froth are produced in the crown of the plant which is usually about the time the alfalfa is 4 to 6 inches tall. Apply in a minimum of 10 gals. of water per acre by ground or 2 gals. of water per acre by air.

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 lbs.) per acre per year.

APPLES (21): 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): Use 1 lb. per 100 gals. or a maximum of 5 lbs. per acre. 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 1 1/2 lbs. per 100 gals. 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.

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 lbs.) per acre per year.

APRICOTS (21), NECTARINES (21), PEACHES (21): Peachtree Borer, Lesser Peachtree Borer: Use 1 1/2 lbs. per 100 gals.; *West Coast*: Use 1 to 1 1/2 lbs. per 100 gals.; *Southeastern States*: Use 3 to 5 lbs. per 100 gals. 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 lbs.) per acre per year.

APRICOTS (30), NECTARINES (30), PEACHES (30): 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: Use 1 lb. per 100 gals. or a maximum of 4 to 5 lbs. per acre; *West Coast*: Do not use more than 6 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not feed cull fruits to animals nor 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 lbs.) per acre per year.

5/7/11

ARTICHOKES (7): Aphids (including Artichoke Aphid, Green Peach Aphid): Use 1 1/2 to 2 lbs. per acre. Artichoke Plume Moth, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed. Apply in a minimum of 20 gals. of water per acre by ground and in a minimum of 10 gals. of water per acre 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 lbs.) per acre per year.

BARLEY, OATS, RYE, WHEAT: Army Cutworm: Use 1 lb. per acre. For aerial application, apply in 2 gals. of diesel fuel oil per acre. Cereal Leaf Beetle (Illinois, Indiana, Michigan and Ohio only): Use 1/2 to 1 lb. per acre. Apply when small larvae are readily found in the field. For aerial application, use a minimum of 1 to 2 gals. of water per acre. Aphids: Use 1 to 1 1/2 lbs. per acre. Make application 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 lbs.) 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): Black Bean Aphid, Bean Leaf Skeletonizer, Cowpea Curculio, Cucumber Beetles, Flea Beetles, Green Stink Bug, Leafhoppers, Mexican Bean Beetle: Use 1 to 2 lbs. per acre. Aphids, Armyworms, Western Bean Cutworm, Whitefly: Use 2 lbs. 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.

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 lbs.) per acre per year.

BLUEBERRIES: Blueberry Bud Mite: Use 3 lbs. per 300 gals. 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 lbs.) per acre per year.

BROCCOLI (7), BRUSSEL SPROUTS (14), CABBAGE (7), CAULIFLOWER (14): Cabbage Aphid, Cabbage Looper, Cross-striped Cabbageworm, Diamondback Moth Larvae, Flea Beetles, Harlequin Bug, Imported Cabbageworm, Leafhoppers, Stink Bugs: Use 1 1/2 to 2 lbs. per acre. Armyworms, Cutworms, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 4 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

CARROTS (7): Green Peach Aphid, Leafhoppers: Use 1 to 2 lbs. per acre. Armyworms, Flea Beetles, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

CELERY (4): Green Peach Aphid, Cabbage Looper, Leafhoppers: Use 1 to 2 lbs. per acre. Armyworms, Flea Beetles, Whitefly: Use 2 lbs. per acre. Make applications 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 lbs.) per acre per year.

CELERY (7): Green Peach Aphid: Use 1 lb. 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 lbs.) per acre per year.

CHERRIES (21): Peachtree Borer, Lesser Peachtree Borer: Use 1 1/2 lbs. per 100 gals.; West Coast: 1 to 1 1/2 lbs. per 100 gals. Thoroughly wet all bark from ground to scaffold limbs. Black Cherry Aphid, Green Fruitworm, Plum Rust (Nursery) Mite: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications when insects appear or feeding is noticed. *Pacific Northwest Only:* Eyespotted Bud Moth, Fruittree Leafroller: Use 1 lb. per 100 gals or 4 to 5 lbs. per acre. For bud moth control apply at "popcorn" stage. For leafroller control, apply during pre-pink stage of growth.

Michigan Only: Mineola Moth: Use 2 lbs. per 100 gals. Apply in the delayed dormant period.

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 lbs.) per acre per year.

NURSERY STOCK DIP; CHERRY, PEACH, PLUM: Peachtree Borer: Use 4 lbs. per 40 gals. Mix thoroughly.

Immerse trees so that the roots and crowns are covered well above the grafting bud scar.

Plant immediately or dry before returning stock to storage.

CITRUS (Non-bearing Trees and Nursery Stock): Citrus Aphid: Use 1/2 lb. per 100 gals. or a maximum of 5 lbs. 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 lbs.) per acre per year.

COLLARDS (21): Aphids, Cabbage Looper, Diamondback Moth Larvae, Fall Armyworm, Flea Beetles, Harlequin Bug, Imported Cabbageworm, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make applications 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 lbs.) per acre per year.

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COTTON: Aphids: Use 3/4 to 1 1/2 lbs. per acre. Boll Weevil: Use 1 to 3 lbs. per acre. Bollworm, Cabbage Looper, Cotton Leafperforator, Cotton Leafworm, Fleahoppers, Lygus Bugs, Stink Bugs, Tobacco Budworm: Use 2 to 3 lbs. per acre. Thrips: Use 3 lbs. per acre. Make applications when insects appear or feeding is noticed. For control of aphids, through coverage is important.

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 meat or dairy animals in treated fields. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

CUCUMBERS (2), MELONS (2), PUMPKINS (2), SUMMER and WINTER SQUASH (2): Aphids, Cucumber Beetles, Melonworm, Pickleworm, Rindworm (on watermelons), Squash Beetle, Squash Bug, Squash Vine Borer, Striped Flea Beetle: Use 1 to 2 lbs. per acre. Cabbage Looper, Omnivorous Leafroller, Whitefly: Use 2 lbs. 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.

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

EGGPLANT (1): Blister Beetles, Colorado Potato Beetles, Flea Beetles; Green Peach Aphids, Green Stink Bugs: Use 1 to 2 lbs. per acre. Whitefly: Use 2 lbs. 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 lbs.) per acre per year.

FILBERTS (1): Filbert Aphid, Filbert Bud Mite, Filbert Leafroller: Use 1 lb. per 100 gals. or 3 to 4 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

GRAPES (7): Grape Leafhopper, Grape Phylloxera (leaf form), Rose Chafer: Use 1 lb. per 100 gals. or 2 to 3 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

KALE (21): Cabbage Flea Beetle, Harlequin Bug, Imported Cabbageworm: Use 1 1/2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 1 application per year. Do not exceed a maximum of 0.75 lb. active ingredient (i.e., 1 1/2 lbs.) per acre per year.

LETTUCE (14): Cabbage Looper, Diamondback Moth Larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Armyworms, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

On Head Lettuce: Do not exceed 3 applications after thinning. Remove wrapper leaves at harvest.

On Leaf Lettuce: 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 lbs.) per acre per year.

MUSTARD GREENS (21): Aphids, Cabbage Looper, Diamondback Moth Larvae, Fall Armyworm, Flea Beetles, Harlequin Bug, Imported Cabbageworm, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 1 application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 lbs.) per acre per year.

PEARS (7): Green Fruitworm, Tarnished Plant Bug: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications at white bud or petal fall when insects appear or feeding is noticed. Pear Psylla: Use 5 lbs. per acre. Apply in a minimum of 10 gals. of water for aerial application or in 300 gals. of water for dilute application. Apply when adults are first observed or nymphs are small and repeat to maintain control. Pear Rust Mite, Consperse Stink Bug (foliar treatment): Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications when insects appear or feeding is noticed. Stink bugs must be wet by spray to obtain control. Consperse Stink Bug (soil treatment): Use 1 lb. per 100 gals.; 200 to 400 gals. per acre. Apply to orchard floor and around trees prior to bloom. Pear Leaf Blister Mite: Use 1/2 to 1 lb. per 100 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 lbs.) 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): Pea Aphid, Pea Weevil: Use 1 to 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

PECANS: Black Pecan Aphid, Pecan Nut Casebearer, Spittlebug: Use 1 1/2 lbs. per 100 gals. 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 are deposited. For spittlebug, apply when first leaves are half grown and repeat as required. Pecan Leaf Phylloxera: Use 1 to 1 1/2 lbs. per 100 gals. Apply when nymphs appear and before they are enclosed in plant tissue. For high populations, use the higher rate.

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 lbs.) per acre per year.

PEPPERS (1): Flea Beetles, Green Peach Aphid, Hornworms, Pepper Maggot: Use 1 lb. 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 lbs.) per acre per year.

PEPPERS (4): Armyworms, Flea Beetles, Green Peach Aphid, Hornworms, Leafhoppers, Pepper Maggot: Use 1 to 2 lbs. per acre. Whitefly: Use 2 lbs. 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 2.0 lbs. active ingredient (i.e., 4 lbs.) per acre per year.

PINEAPPLE (For Fresh Market Only) (7): Pineapple Fruit Mite: Use 3 to 4 lbs. 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.

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 lbs.) per acre per year.

PLUMS (7), PRUNES (7): Fruittree Leafroller (Pacific Northwest Only): Use 1 lb. per 100 gals. or 4 to 5 lbs. 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: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. 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: Use 1 lb. per 100 gals. or 4 to 5 lbs. per acre. Make applications when insects appear or feeding is noticed. Lesser Peachtree Borer: Use 1 1/2 lbs. per 100 gals. or 4 to 5 lbs. per acre. Apply spray to thoroughly wet the trunk and main branches. Peachtree Borer: Use 1 1/2 lbs. per 100 gals. or 4 to 5 lbs. per acre; West Coast: 1 to 1 1/2 lbs. per 100 gals. or 4 to 5 lbs. 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 lbs.) per acre per year.

POTATOES (1): Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leafhopper, Plant Bugs, Potato Flea Beetles, Potato Leafhopper, Potato Tuberworm, Threelined Potato Beetle: Use 1 to 2 lbs. per acre. European Corn Borer, Potato Psyllid: Use 1 1/2 to 2 lbs. per acre. False Chinch Bug, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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

SAFFLOWER: Green Peach Aphid, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

SPINACH (21): Armyworms, Crown Mites, Flea Beetles, Green Peach Aphid, Leafhoppers: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed.

Do not make more than 1 application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 lbs.) per acre per year.

STRAWBERRIES (4): Meadow Spittlebug, Strawberry Aphid, Tarnished Plant Bug, Whitefly: Use 2 lbs. 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: Use 4 lbs. per acre in 400 gals. 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 lbs.) per acre per year.

STRAWBERRIES (Northwest Use Only): Garden Symphylan (aids in reducing damage): Use 2 lbs. per 100 gals. 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. Drain and allow plants to dry before setting them out in the field.

SUGAR BEETS (30): Green Peach Aphid, Meadow Spittlebug: Use 1 to 2 lbs. per acre. Sugar Beet Webworm: Use 1 1/2 to 2 lbs. per acre. Whitefly: Use 2 lbs. per acre. Make application(s) when insects appear or feeding is noticed. Make 1 or 2 applications per year as needed for control.

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 lbs.) per acre per year.

SUNFLOWERS (1): Sunflower Moth: Use 2 lbs. 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.

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 lbs.) per acre per year.

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SWEET CORN (Fresh Vegetable Use Only) (1): Corn Leaf Aphid, Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed. Corn Earworm: Use 3 lbs. 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 lbs.) per acre per year.

SWEET POTATOES (1): Sweet Potato Flea Beetle, Sweet Potato Weevil: Use 1 lb. 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 lbs. 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 endosulfan. Whitefly: Use 2 lbs. per acre. Make applications when insects appear or feeding is noticed. Banded Cucumber Beetle Larvae (aids in control) (South Central States and Puerto Rico Only): Use 2 to 4 lbs. per acre broadcast, or 2/3 to 1 1/3 lbs. per acre 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 lbs.) per acre per year.

TOBACCO (5): Aphids (including Green Peach Aphid, Tobacco Aphid), Budworm, Cabbage Looper, Flea Beetles, Hornworms: *Seed Bed:* Use 1 lb. per 100 gals. Make applications when insects appear or feeding is noticed. Apply about 6 gals. of finished spray per 100 square yards. Green June Bug Larvae: *Plant Bed:* Use 1/2 lb. per 100 gals.

Make applications when insects appear or feeding is noticed. Drench at a rate of 1 gal. per square yard. Aphids (including Green Peach Aphid, Tobacco Aphid), Budworm, Cabbage Looper, Flea Beetles, Green June Bug Larvae, Hornworms: *Field:* Use 1 to 2 lbs. per acre. Stink Bugs: *Field:* Use 2 to 3 lbs. per 100 gals. Make applications when insect activity or feeding is noticed.

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

TOMATOES (Field and Greenhouse) (2): Aphids, Blister Beetles, Colorado Potato Beetle, Flea Beetles, Tomato Hornworm, Webworm (California Only): Use 1 to 2 lbs. per acre. Cabbage Looper, Stink Bugs: Use 1 1/2 to 2 lbs. per acre. Tomato Fruitworm, Tomato Russet Mite, Whitefly, Yellowstriped Armyworm: Use 2 lbs. per acre. Whitefly: Use 1 lb. per 100 to 200 gals. of water. Make applications when insects appear or feeding is noticed.

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

WALNUTS: Walnut Aphid: Use 3 to 4 lbs. per acre. Make applications when insects appear or feeding is noticed.

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 lbs.) per acre per year.

COMMERCIALLY GROWN ORNAMENTALS

Ornamental Plants

LEATHERLEAF FERN (LEATHER HOLLY FERN): Leatherleaf Fern Borer: Use 1 lb. per 100 gals. (1 tablespoon per gal.). 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.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

ORNAMENTALS (Greenhouse, and Out-of-Doors): Aphids, Cyclamen Mite, Rose Chafer, Whitefly: Use 1 lbs. per 100 gals. (1 tablespoon per gal.). Make applications when insects appear or feeding is noticed.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. On chrysanthemums, best results will be obtained if applied before plants flower. Do not apply to "Bonafon Deluxe", "Frod Shoemith", and "White Knight" chrysanthemums as injury may result. Do not use on Birch trees. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

Ornamental Trees and Shrubs

DOGWOOD, LILAC: Dogwood Borer, Lilac Borer: Use 1 to 2 lbs. per 100 gals. (1 to 2 tablespoons per gal.). Apply in early June and repeat in 10 to 14 days. Drench all bark areas down to the ground level.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

DOUGLAS FIR (Grown for Ornamentals, Nursery Stock or Christmas Trees) *Pacific Northwest Only:* Aphids, Cooley Spruce Gall Adelgid, Douglas Fir Needle Midge: Use 1 lb. per 100 gals. (1 tablespoon per gal.) 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.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

PINES (Austrian, Jack, Red, Scotch, White): Zimmerman Pine Moth: Use 1 1/2 lbs. per 100 gals. (1 1/2 tablespoons per gal.) Apply in mid-April and again, if necessary, in late fall. Thoroughly wet bark and main stem, especially where branches join main stem.

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Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

SHADE TREES (Except Birch), SHRUBS: Aphids: Use 1 lb. per 100 gals. (1 tablespoon per gal.) Make applications when insects appear or feeding is noticed.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

SPRUCE (New England Area Only): Spruce Gall Aphid: Use 1 lb. per 100 gals. (1 tablespoon per gal.) Apply in late April or early May when aphids are present but before galls are formed.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

TAXUS: Taxus Bud Mite: Use 1 lb. per 100 gals. (1 tablespoon per gal.) Make 3 to 5 applications beginning in mid-May. Thoroughly spray foliage, twigs, and bark. Black Vine Weevil: Use 2 lbs. per 100 gals. (2 tablespoons per gal.) Spray thoroughly and drench soil under the plants. Apply when the weevils first appear and repeat in 14 days.

Food utensils such as teaspoons must not be used for food purposes after use in measuring pesticides. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 lbs.) per acre per year.

NOTICE ON CONDITION OF SALE

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials.

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CALIFORNIA SUPPLEMENTAL LABEL

PROCEDURES FOR REDUCING RISK OF CONTAMINATION OF AQUATIC ECOSYSTEMS

FOR CROP USES LISTED ON THE PRODUCT LABEL

Endosulfan may be a source of contamination in aquatic ecosystems as a result of run-off from agricultural land due to discharge of irrigation water or during periods of heavy rainfall.

To minimize the chance of aquatic impact, the following conditions must be met to allow endosulfan applications:

DIRECTIONS FOR USE IN CALIFORNIA (General)

IN ADDITION TO SPECIFIC INSTRUCTIONS UNDER DIRECTIONS FOR USE ON THE PRINCIPAL LABEL, THE FOLLOWING CONDITIONS MUST ALSO BE FOLLOWED FOR USE IN CALIFORNIA:

1. Do not apply this product to fields during irrigation or for 72 hours following an irrigation.
 2. Do not apply this product through any type of irrigation system.
3. Do not apply more than 1.5 lbs. a.i. per acre per application or more than 3.0 lbs. a.i. per acre per season. (Orchard crops and strawberries exempted on rate/acre/application restriction.)
4. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.
5. Do not apply by ground or air within a distance of 300 feet of natural bodies of water including lakes, ponds, streams and estuaries.

FOR DRIFT CONTROL

1. All application equipment should be properly maintained and calibrated using appropriate carriers.
2. Do not make aerial or ground applications during temperature inversions.
3. Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Do not discharge at a height of more than 10 feet above the crop or target.
 4. For aerial application a positive shutoff system shall be in place to control flow of liquid to spray nozzles as follow: Each individual nozzle shall be equipped with a check valve and the flow controlled by a suckback device or a boom pressure release device; or each nozzle shall be equipped with a positive action valve.
5. For aerial applications, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor vortices. The working boom length must not exceed 75% of wing span or rotor diameter.
6. Aircraft boom pressure shall not exceed 40 pounds per square inch.
7. Aircraft nozzles shall be equipped with orifices directed backward parallel to the horizontal axis of the aircraft in flight.
8. Aircraft nozzles shall not be equipped with any device or mechanism which would cause a sheet, cone, fan, or similar type dispersion of the discharged material except as otherwise provided.
9. Fixed wing aircraft and helicopters operating in excess of 60 mph shall be equipped with jet nozzles having an orifice not less than 1/16 inch in diameter (D-4 or larger).
10. Helicopters operating at 60 mph or less shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter. A number 46 or equivalent whirlplate may be used.
11. For ground applications, equipment other than handguns shall be equipped with nozzles having an orifice not less than 1/16 inch in diameter or larger. Boom nozzles shall be operated at a boom pressure not to exceed 30 pounds per square inch.

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ACCEPTABLE SITES FOR ENDOSULFAN APPLICATION

1. FIELDS, WITH NO DRAINS, HAVING CONTAINMENT THROUGH BERMS (able to hold irrigation water and normal rainwater), LEVEES AND NON-DRAINING CIRCULATION SYSTEMS.
2. FIELDS WITH DRAINS, BUT DRAINAGE FLOWS TO SUMP, FARM POND, EVAPORATION POND, OR RECIRCULATION SYSTEM WITHOUT DRAINAGE (uncontrollable overflow acceptable, e.g., 10 or 100 year flood). Only grower maintained recirculation systems without drainage are acceptable.
3. FIELDS WITH SURFACE DRAINS THAT NATURALLY FLOW ONTO PASTURELAND OR FALLOW FIELDS THAT HAVE NO CHanneled DRAINAGE AND ARE AT LEAST 300 FEET LONG.

UNACCEPTABLE SITES FOR ENDOSULFAN APPLICATION

1. FIELDS DRAINING DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, LAKES, PONDS, MARSHES, BAYS, ESTUARIES, OR THE OCEAN.
2. FIELDS DRAINING INTO SURFACE DRAINAGE DITCHES OR CANALS THAT FLOW DIRECTLY INTO SURFACE WATERS SUCH AS STREAMS, RIVERS, LAKES, PONDS, MARSHES, BAYS, ESTUARIES, OR THE OCEAN.
3. ANY AND ALL FIELDS WITH SURFACE DRAINAGE PATTERNS IN THE MOSS LANDING DRAINAGE SYSTEM HAVING MAIN ARTERIES THAT DRAIN INTO THE ELKHORN SLOUGH (northern portion of Monterey County).
4. ANY AND ALL FIELDS WITH DRAINAGE PATTERNS IN THE SAN DIEGO CREEK DRAINAGE SYSTEM HAVING MAIN ARTERIES THAT DRAIN INTO NEWPORT BAY.

ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED LABEL ARE TO BE FOLLOWED.

THIS LABELING MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.