

APR - 3 1995

Ms. Carol Odee
Makhteshim-Agan of North America Inc.
551 Fifth Avenue, Suite 1100
New York, NY 10176

Dear Ms. Odee:

Subject: Amendment - Update label
Thionex 50 WP
EPA Reg. No. 66222-2
Your submission dated March 18, 1991

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(a), is acceptable provided that you:

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 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 bearing the amended labeling:
 - a) The WPS required items as shown on your labeling approved March 24, 1994 should be incorporated in the proper location on this label, along with deletions as you had made for WPS compliance (unless directed otherwise by this letter).
 - b) Revise the **Statement of Practical Treatment** to read as follows (retain the Note to Physician as shown on this draft label):

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 touching back of throat with a finger or by giving one (1) ounce of syrup of ipecac, if available. If person is unconscious or convulsing, do not give anything by mouth and do not induce vomiting.

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

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

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

- c) Revise the text of the **HAZARDS TO HUMANS AND DOMESTIC ANIMALS** to read as follows:

Fatal if swallowed. May be fatal if inhaled or absorbed through skin. Causes moderate eye irritation. Do not get in eyes, on skin, or on clothing. Do not breathe dust or spray mist. Do not contaminate food or feed. Keep out of reach of domestic animals.

- d) The PPE requirements, Environmental Engineering Statement and User Safety Requirements should then appear as shown on your WPS label accepted March 4, 1994 with the following exception. Change the order of the PPE listing such that the PPE for cleaning equipment, mixing, or loading appears as the last item (i.e., after the respirator requirement) and revise that entry to read:

Add a chemical-resistant apron when cleaning equipment, mixing or loading.

- e) In the **ENVIRONMENTAL HAZARDS**, add "Do not contaminate water by cleaning of equipment or by disposal of equipment washwaters." after "...are important resources."
- f) Under the heading **DIRECTIONS FOR USE**, use the paragraph from your label accepted March 4, 1994 and then directly under add: Do not apply this product through any type of irrigation equipment.
- g) Revise the heading to **GENERAL INSTRUCTIONS**, and revise the fifth sentence to read: "For ground application, apply recommended amount of pesticide in a minimum of 10 gallons of water per acre on vegetable or row crops, unless otherwise noted."

- h) For **ALFALFA**, add **NOTE:** before "Do not graze...".
- i) For **APPLES**, add **NOTE:** before "Do not feed pomace...". Also, revise "Do not make more than 2..." to read "For all uses, do not make more than 2...".
- j) For **APRICOTS (21), etc.** add **NOTE:** before "Do not feed cull fruits...". Also, revise "Do not make more than..." to read "For all uses, do not make more than ...".
- k) For **APRICOTS (30), etc.** add **NOTE:** before "Do not feed cull fruits...". Also, revise "Do not make more than..." to read "For all uses, do not make more than...".
- l) For **ARTICHOKES**, add **NOTE:** before "Do not make more than 2 applications...", which should be revised to read "For all uses, do not make more than 2 applications...".
- m) For **BARLEY, etc.**, add **NOTE:** before "Do not apply after heads begin to form." and revise "Do not make more than 2..." to read "For all uses, do not make more than 2...".
- n) For **BEANS, etc.**, relocate "and" to appear before rather than after "SOUTHERN FIELD". Also, add **NOTE:** before "Do not feed treated...", and revise "Do not make more than 3..." to read "For all uses, do not make more than 3...".
- o) For **BLUEBERRIES**, add **NOTE:** before "Do not apply after...".
- p) For **BROCCOLI, etc.**, add **NOTE:** before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".
- q) For **CARROTS**, add **NOTE:** before "Do not use tops...". Also, revise "Do not make more than..." to read "For all uses, do not make more than...".
- r) For **CELERY (4)**, add **NOTE:** before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".
- s) For **CELERY (7)** add **NOTE:** before "Do not make more than...".
- t) For **CHERRIES**, add the following directions for control of Peach Tree Borer and Lesser Peach Tree Borer after "Use 1 1/2 pounds 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." Also, add **NOTE:** before "All Uses: Do not...", which should be revised to read "For all uses, do not..."

- u) For **CHERRY, PEACH, PLUM Nursery Stock Dip**, delete "Wear rubber gloves during the dipping operation.", since the WPS PPE requirements supersede this. Also, add **NOTE:** before "Plant immediately..."
- v) For **CITRUS** add **NOTE:** before "Do not apply to bearing...". Also, the Agency believes that 1 pound per 100 gallons may be the correct rate, based on the rate appearing on endosulfan 3 EC labels. FMC is currently determining the correct rate for 50 WP labels, please coordinate with FMC when preparing your revised label.
- w) For **COLLARDS**, delete "All uses:" before "Make application...". Add "**NOTE:** Do not make more than one application per year." after "...is noticed". Revise "Do not exceed..." to read "For all uses, do not exceed..."
- x) For **COTTON**, add **NOTE:** before "Applications may be made...". Also, revise "Do not exceed..." to read "For all uses, do not exceed..."
- y) For **CUCUMBERS, etc.,**, add **NOTE:** before "Do not make more than...", which should be revised to read "For all uses, do not make more than..."
- z) For **EGGPLANT**, add **NOTE:** before "Do not make more than...", which should be revised to read "For all uses, do not make more than..."
- aa) For **FILBERTS**, add **NOTE:** before Do not graze..."
- bb) For **GRAPES**, add **NOTE:** before Do not use on..."
- cc) For **KALE**, add **NOTE:** before "Do not make more than..."
- dd) For **LETTUCE**, add **NOTE:** before "On Head Lettuce...". Also, revise "Do not make more than..." to read "For all uses, do not make more than..."
- ee) For **MUSTARD GREENS**, add **NOTE:** before "Do not make more than...", which should be revised to read "For all uses, do not make more than..."
- ff) For **PEARS**, replace "All Uses:" before "Do not feed..." with **NOTE:** and revise "Do not make more than 2..." to read

"For all uses, do not make more than 2...". Also, delete "Note:" before "Aerial applications...".

- gg) For PEAS (Seed Crop Only), add NOTE: before "Use only on peas...".
- hh) For PECANS, add NOTE: before "Do not apply after shuck split.". Also, revise "Do not make more than 2..." to read "For all uses, do not make more than 2...".
- ii) For PEPPERS(1), add NOTE: before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".
- jj) For PEPPERS(4), add NOTE: before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".
- kk) For PINEAPPLE (For Fresh Market Only), add NOTE: before "Do not feed treated forage...".
- ll) For Plums, Prunes, replace "All Uses:" before "Do not allow.." with NOTE: and revise "Do not make more than..." to read "For all uses, do not make more than...".
- mm) For POTATOES, add NOTE: before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".
- nn) For SAFFLOWER, add NOTE: before "Do not apply after...". Also, revise "Do not make more than..." to read "For all uses, do not make more than...".
- oo) For SPINACH, add NOTE: before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".
- pp) For STRAWBERRIES, add NOTE: before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".
- qq) For STRAWBERRIES (Northwest Use Only), delete "Wear rubber gloves during the dipping operation.", since the WPS PPE requirements supersede this. Add NOTE: before "Drain and allow...".
- rr) For SUGAR BEETS, add NOTE: before "Do not feed treated...". Also, revise "Do not make more than..." to read "For all

uses, do not make more than...".

ss) For **SUNFLOWERS**, add **NOTE:** before "Do not feed treated...".

tt) For **SWEET CORN**, add **NOTE:** before "Do not apply to...". Also, revise "Do not make more than..." to read "For all uses, do not make more than...".

uu) For **SWEET POTATOES**, replace "All uses:" before "Do not feed..." with **NOTE:** and revise "Do not make more than..." to read "For all uses, do not make more than...".

vv) For **TOBACCO**, replace "All uses:" before "Do not make..." with **NOTE:** and revise "Do not make..." to read "For all uses, do not make...".

ww) For **TOMATOES**, delete "In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protection against endosulfan." since the WPS PPE requirements for all use sites, both greenhouse and outdoors, supersede this. Add **NOTE:** before "Do not make more than...", which should be revised to read "For all uses, do not make more than...".

xx) For **WALNUTS**, add **NOTE:** before " Do not apply after husk split."

yy) For **LEATHERLEAF FERN**, add **NOTE:** before "Do not exceed...".

zz) For **ORNAMENTALS (Greenhouse and Out-of Doors)**, add **NOTE:** before "On chrysanthemums...". Delete "In greenhouse applications, wear a mask or respirator approved by MSA and OSHA for protection against endosulfan." since the WPS PPE requirements for all use sites, both greenhouse and outdoors, supersede this. Also, revise "Do not exceed..." to read "For all uses, do not exceed...".

aaa) For **DOGWOOD, LILAC**, add **NOTE:** before "Do not exceed...", which should be revised to read "For all uses, do not exceed...".

bbb) For **DOUGLAS FIR**, correct "...when white cotton tufts appear" to "...when white cottony tufts appear". Add **NOTE:** before "Do not exceed...", which should be revised to read "For all uses, do not exceed...".

ccc) For **PINES**, add **NOTE:** before "Do not exceed...".

ddd) For **SHADE TREES**, add **NOTE:** before "Do not exceed...".

- eee) For **SPRUCE**, add **NOTE:** before "Do not exceed...".
- fff) For **TAXUS**, replace "All uses: before "Do not exceed..." with **NOTE:.**

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

- 3) Submit three (3) copies of your final printed labeling before you release the product for shipment.

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

Sincerely,

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

8 7 12

THIONEX 50 WP

Insecticide

For Agricultural or Commercial Use Only

EPA Reg. No. ~~11678-42~~ ⁶⁶²²²⁻²

EPA Est. No. 11678-IS-01

Active Ingredient:	ACCEPTED with COMMENTS in EPA Letter Dated	By Wt.
*Endosulfan: (Hexachlorohexahydro-2,4,3-benzodioxathioepoxide)	50.0%
Inert Ingredients:	50.0%

*Thionex

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 66222-2

KEEP OUT OF REACH OF CHILDREN



DANGER-POISON



PELIGRO

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 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.

See Other Panels for Additional Precautionary Information.

Net Content lbs.

Manufactured by: Makhteshim Chemical Works Ltd.
c/o Makhteshim-Agan (America) Inc.
245 Fifth Avenue, Suite 1901
New York, NY 10016

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

DANGER

Fatal if swallowed or inhaled. Harmful if absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Do not breathe vapor. 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 the protective equipment specified for applicator. 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 or 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 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 overall 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 reentry intervals for various crops treated with this product, such as the 48 hour reentry 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:

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DANGER

Area treated with endosulfan on (insert date). Do not enter without appropriate protective clothing for 24 hours (insert State Department of Agriculture's reentry 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. Carefully open containers. After partial use, fold and roll back bags, clamp and close tightly. 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.

GENERAL INSTRUCTION

Not for use in and 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 of Thionex 50 WP, 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 - Apply 1/2 pound per acre one week after eggs begin to hatch or when first small masses of froth are produced in the crowns of the plant, 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 2 gallons 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 pounds) 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 pound per 100 gallons of water or a maximum of 5 pounds 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 pounds per 100 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. Do not feed pomace from treated apples to livestock. Do not feed cull fruits to animals nor 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 pounds) per acre per year.

APRICOTS [21], NECTARINES [21], PEACHES [21]: Peach Tree Borer, Lesser Peach Tree Borer - Use 1 1/2 pounds per 100 gallons; West Coast use 1 to 1 1/2 pounds per 100 gallons; Southeastern States use 3 to 5 pounds 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 pounds) per acre per year.

-OR-

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 pound per 100 gallons or a maximum of 4 to 5 pounds per acre. West Coast use more than 6 pounds 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 pounds) per acre per year.

ARTICHOKES [7]: Aphids (including Artichoke Aphid, Green Peach Aphid) - Use 1 1/2 to 2 pounds per acre. Artichoke Plume Moth, Whitefly - Use 2 pounds 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 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 pounds) per acre per year.

BARLEY, OATS, RYE, WHEAT: Army Cutworm - Use 1 pound per acre. For aerial application, apply in 2 gallons of diesel fuel oil per acre. Cereal Leaf Beetle (Illinois, Indiana, Michigan and Ohio only) - Use 1/2 to 1 pound per acre. Apply when small larvae are readily found in the field. For aerial applications, use a minimum of 1 to 2 gallons of water per acre. Aphids - Use 1 to 1 1/2 pounds per 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 pounds) per acre per year.

BEANS, Succulent and Dry (except Lima Beans) [3], SOUTHERN FIELD and PEAS (Succulent type, including Black-eyed Peas, Crowder Peas and Southern Peas) [3]: Black Bean Aphid, Bean Leafskeltonizer, Cowpea Curculio, Cucumber Beetles, Flea Beetles, Green Stink Bug, Leafhoppers, Mexican Bean Beetle - Use 1 to 2 pounds per acre. Aphids, Armyworms, Western Bean Cutworm, Whitefly - Use 2 pounds 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 to livestock 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

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

BLUEBERRIES: Blueberry Bud Mite - Use 3 pounds in 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 pounds) per acre per year.

BROCCOLI [7], BRUSSELS SPROUTS [14], CABBAGE [7], CAULIFLOWER [14]: Cabbage Aphid, Cabbage Looper, Cross-Striped Cabbage Worm, Diamondback Moth Larvae, Flea Beetles, Harlequin Bug, Imported Cabbage Worm, Leafhoppers, Stink Bugs - Use 1 1/2 to 2 pounds per acre. Armyworms, Cutworms, Whitefly - Use 2 pounds per acre. Make application 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 pounds) per acre per year.

CARROTS [7]: Green Peach Aphid, Leafhoppers - Use 1 to 2 pounds per acre. Armyworms, Flea Beetles, Whitefly - Use 2 pounds per acre. Make application 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 pounds) per acre per year.

CELERY [4]: Green Peach Aphid, Cabbage Looper, Leafhoppers - Use 1 to 2 pounds per acre. Armyworms, Flea Beetles, Whitefly - Use 2 pounds per acre. 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 pounds) per acre per year.

.OR.

CELERY [7]: Green Peach Aphid - Use 1 pound per acre. Make applications when insects appear or feeding is noticed. Do not make more than 2 applications per season. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 pounds) per acre per year.

CHERRIES [21]: Peach Tree Borer, Lesser Peach Tree Borer - Use 1 1/2 pounds per 100 gallons; West Coast use 1 to 1 1/2 pounds per 100 gallons. Thoroughly wet all bark from ground to scaffold limbs. Black Cherry Aphid, Green Fruitworm, Plum Rust (Nursery) Mite - Use 1 pound per 100 gallons or 4 to 5 pounds per acre. Make application when insects appear or feeding is noticed. Pacific Northwest Only: Eyespotted Bud Moth, Fruit Tree Leafroller. Use 1 pound per 100 gallons or 4 to 5 pounds 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 pounds per 100 gallons. Apply in the delayed dormant period. All uses: 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 pounds) per acre per year

CHERRY, PEACH, PLUM NURSERY STOCK DIP: Peach Tree Borer - Use 4 pounds to 40 gallons. Mix thoroughly. Immerse trees so that roots and crowns are covered well above grafting bud scar. Wear rubber gloves during dipping operation. Plant immediately or dry before returning stock to storage.

CITRUS, NURSERY AND NON-BEARING STOCK: Citrus Aphid - Use 1/2 pound per 100 gallons or a maximum of 5 pounds 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 pounds) 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 pounds per acre. Whitefly - Use 2 pounds per acre. All uses: Make application when insects appear or feeding is noticed. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 2 pounds) per acre per year.

COTTON: Aphids - Use 3/4 to 1 1/2 pounds per acre. Boll Weevil - Use 1 to 3 pounds per acre. Bollworm, Cabbage Looper, Cotton

Leafperforator, Cotton worm, Fleahoppers, Lygus Bugs, Stink Bugs, Tobacco Budworm - Use 3 pounds per acre. Make applications when insects appear or feeding is noticed. For control of aphids, thorough 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 dairy or meat animals in treated fields. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 pounds) per acre per year.

CUCUMBERS [2], MELONS [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 pounds per acre. Cabbage Looper, Omniverous Leafroller, Whitefly - Use 2 pounds 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 pounds) per acre per year.

EGGPLANT [1]: Blister Beetle, Colorado Potato Beetle, Flea Beetles, Green Peach Aphid, Green Stink Bug - Use 1 to 2 pounds per acre. Whitefly - Use 2 pounds 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 pounds) per acre per year.

FILBERTS [1]: Filbert Aphid, Filbert Bud Mite, Filbert Leafroller - Use 1 pound per 100 gallons or 3 to 4 pounds 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 pounds) per acre per year.

GRAPES [7]: Grape Leafhopper, Grape Phylloxera (leaf form), Rose Chafer - Use 1 pound per 100 gallons or 2 to 3 pounds per acre. Make applications when insects appear or feeding is noticed. Do not use on Baco No. 1, Baco Noir, Seibel 7653 (Chancellor), Seibel 8375 (Colobel), Seibel 13053 (Cascade) or Concord varieties of grapes 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 pounds) per acre per year.

KALE [21]: Cabbage Flea Beetle, Harlequin Bug, Imported Cabbageworm - Use 1 1/2 pounds per acre. Make application 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 pounds) per acre per year.

LETTUCE [14]: Cabbage Looper, Diamondback Moth larvae, Green Peach Aphid, Imported Cabbageworm, Leafhoppers - Use 1 1/2 to 2 pounds per acre. Armyworms, Whitefly - Use 2 pounds per acre. Make applications when insects appear or feeding is noticed. On Head Lettuce, do not make more than 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 pounds) 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 pounds per acre. Whitefly - Use 2 pounds per acre. Make application 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 pounds) per acre per year.

PEARS [7]: Green Fruitworm, Laminated Plant Bug - Use 1 pound per 100 gallons or 4 to 5 pounds per acre. Make application at white bud or petal fall when insects appear or feeding is noticed. Pear Psylla - Use 5 pounds per acre. Apply a minimum of 10 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, Consperse Stink Bug (foliar treatment) - Use 1 pound per 100 gallons or 4 to 5 pounds 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 pound per 100 gallons or 200

to 400 gallons per acre. Apply to orchard floor and trees prior to bloom. Pear Leaf Blister Mite - Apply 1/2 to 1 pound per 100 gallons. Apply as a post harvest or dormant treatment. All Uses: 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 pounds) per acre per year. NOTE: Aerial application does 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 pounds 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 pounds) per acre per year.

PECANS: Black Pecan Aphid, Pecan Nut Casebearer, Spittlebug - Use 1 1/2 pounds per 100 gallons. Make applications when insects appear or feeding is noticed. For Casebearer, apply when eggs of first generation appear on 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 - Use 1 to 1 1/2 pounds per 100 gallons. 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 pounds) per acre per year.

PEPPERS [1]: Flea Beetles, Green Peach Aphid, Hornworms, Pepper Maggot - Use 1 pound 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 pounds) per acre per year

-OR-

PEPPERS [4]: Armyworms, Flea Beetles, Green Peach Aphid, Hornworms, Leafhoppers, Pepper Maggot - Use 1 to 2 pounds per acre. Whitefly - Use 2 pounds 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 pounds) per acre per year.

PINEAPPLE (For Fresh Market Only) [7]: Pineapple Fruit Mite - Use 3 to 4 pounds 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 pounds) per acre per year.

PLUMS [7], PRUNES [7]: Fruitree Leafroller (Pacific Northwest Only) - Use 1 pound per 100 gallons or 4 to 5 pounds 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 pound per 100 gallons or 4 to 5 pounds 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 pound per 100 gallons or 4 to 5 pounds per acre. Make applications when insects appear or feeding is noticed. Lesser Peachtree Borer - Use 1 1/2 pounds per 100 gallons or 4 to 5 pounds per acre. Apply spray to thoroughly wet trunk and main branches. Peachtree Borer - Use 1 1/2 pounds per 100 gallons or 4 to 5 pounds per acre. West Coast use 1 to 1 1/2 pounds per 100 gallons or 4 to 5 pounds per acre. Spray thoroughly to cover all bark areas from ground to scaffold limbs. All Uses: 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 pounds) per acre per year.

POTATOES [1]: Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leaffooted Bug, Plant Bugs, Potato Flea Beetles, Potato Leafhopper, Potato Tuberworm, Threelined Potato Beetle - Use 1 to 2 pounds per acre. European Corn Borer, Potato Psyllid - Use 1 1/2 to 2 pounds per acre. False Chinch Bug, Whitefly - Use 2 pounds 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 pounds) per acre per year.

SAFFLOWER: Green Peach Aphid, Whitefly - Use 2 pounds 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 pounds) per acre per year.

SPINACH [21]: Armyworms, Crown Mite, Flea Beetles, Green Peach Aphid, Leafhoppers - Use 1 1/2 to 2 pounds per acre. Whitefly - 2 pounds per acre. 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 pounds) per acre per year.

STRAWBERRIES [4]: Meadow Spittlebug, Strawberry Aphid, Tarnished Plant Bug, Whitefly - Use 2 pounds 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 pounds 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 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 pounds) per acre per year.

STRAWBERRIES (Northwest Use Only) [4]: Garden Symphylan (aids in reducing damage) - Use 2 pounds 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.

SUGARBEETS [30]: Green Peach Aphid, Meadow Spittlebug - Use 1 to 2 pounds per acre. Sugarbeet Weevil - Use 1 1/2 to 2 pounds per acre. Whitefly - Use 2 pounds per acre. Make application(s) when insects appear or feeding is noticed. Make 1 to 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., 6 pounds) per acre per year.

SUNFLOWERS [1]: Sunflower Mite - Use 2 pounds per acre. Make applications when insects appear or feeding is noticed. Make the first application at the onset of bloom. Allow 7 days between applications. Do not feed treated forage 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 pounds) per acre per year.

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

SWEET POTATOES [1]: Sweet Potato Flea Beetle, Sweet Potato Weevil - Use 1 pound 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 pounds 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 THIONEX. Whitefly - Use 2 pounds per acre. Make applications when insect activity or feeding is noticed. Banded Cucumber Beetle (aids in control) (South Central States and Puerto Rico Only) - Use 2 to 4 pounds per acre broadcast or 2/3 to 1 1/3 pounds 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. All uses: 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 pounds) per acre per year.

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TOBACCO [5]: Aphids (including Green Peach Aphid, Tobacco Aphid), Budworm, Cabbage Looper, Flea Beetles, Hornworms - **SEED BED:** Use 1 pound 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 - **PLANT BED:** Use 1/2 pound per 100 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 - **FIELD:** Use 1 to 2 pounds per acre. Stink Bugs - **FIELD:** Use 2 to 3 pounds per 100 gallons. Make applications when insect activity or feeding is noticed. All uses: Do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 pounds) 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 pounds per acre. Cabbage Looper, Stink Bug - Use 1 1/2 to 2 pounds per acre. Tomato Fruitworm, Tomato Russet Mite, Whitefly, Yellowstriped Armyworm - Use 2 pounds per acre. Whitefly - Use 1 pound 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 pounds) per acre per year.

WALNUTS: Walnut Aphid - Use 3 to 4 pounds 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 (6 pounds) per acre per year.

Commercially Grown Ornamentals Ornamental Plants

LEATHERLEAF FERN: Leatherleaf Fern Borer - Use 1 pound 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 pounds) per acre per year.

ORNAMENTALS (Greenhouse and Out of Doors): Aphids, Cyclamen Mite, Rose Chafer, Whitefly - Use 1 pound per 100 gallons. Make applications when insects appear or feeding is noticed. On Chrysanthemums, best results will be obtained if applied before plants flower. Do not apply to "Bonnafon Delux", "Fred Shoemith", and "White Knight" chrysanthemums as injury may result. Do not use on Birch trees. In greenhouse applications, wear a mask or respirator approved by MSHA and OSHA for protection against endosulfan. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 6 pounds) per acre per year.

Ornamental Trees and Shrubs

DOGWOOD, LILAC: Dogwood Borer, Lilac Borer - Use 1 to 2 pounds per 100 gallons. 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 pounds) 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 pound per 100 gallons (1 tablespoon per gallon). Make applications when insects appear or feeding is noticed. For control of Gall Adelgid, apply when white cotton 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 pounds) per acre per year.

PINES (Austrian, Jack, Red, Scotch, White): Zimmerman Pine Moth - Use 1 1/2 pounds per 100 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 pounds) per acre per year.

SHADE TREES (Except Birch), Shrubs: Aphids - Use 1 pound per 100 gallons of water. Make applications when insects appear or feeding is

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

SPRUCE (New England area only): Spruce Gall Aphid - Use 1 pound 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 pounds) per acre per year.

TAXUS: Taxus Bud Mite - Use 1 pound per 100 gallons. Make 3 to 5 applications beginning in mid-May. Thoroughly spray foliage, twigs and bark. Black Vine Weevil - Use 2 pounds per 100 gallons. Spray thoroughly and drench soil under plants. Apply when weevils first appear. Repeat in 14 days. All uses: Do not exceed 3.0 lbs. active ingredient (i.e., 6 pounds) per acre per year.

Dealers Should Sell in Original Packages Only.

WARRANTY STATEMENT

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instruction, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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