

THIONEX 50 WP (ENDOSULFAN)

COMMERCIAL INSECTICIDE

GROUP	2A	INSECTICIDE
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A Wettable Powder for Control on
Vegetables, Fruits, and Field Crops.
Use only on those crops specified on the label

READ THE LABEL BEFORE USING

GUARANTEE: endosulfan.....50%

Warning, contains the allergen soy.



DANGER

POISON

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO. 15333
PEST CONTROL PRODUCTS ACT

NET CONTENTS: 2.27 Kg

Makhteshim-Agan of North America Inc.
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Thionex 50 WP is a wettable powder insecticide which can be combined with most commonly used fungicides, adjuvants and other insecticides. Use only on those crops as specified on the label.

Note: Check compatibilities of combinations before making tank mixes unless previous use of the materials being combined has been proven to be physically compatible.

Directions for Use: Fill spray tank nearly full and pour recommended amount of Thionex on surface of water. The insecticide can be pre-mixed in a bucket half filled with water. Mix can be poured through screen into nearly filled spray tank. Finish filling tank. Keep agitator running during filling and spraying. Coverage of upper and lower leaf surfaces is essential for good insect control. Use sufficient spray to give thorough coverage. Use rate per hectare given for specific use. **DO NOT APPLY BY AIR.**

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Thionex 50 WP contains a Group 2A insecticide. Any insect population may contain individuals naturally resistant to Thionex 50 WP and other Group 2A insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of Thionex 50 WP or other Group 2A insecticides with different groups that control the same pests in a field.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting, record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Makhteshim-Agan of North America Inc. at 1 212 661-9800.

APPLE, PEAR- Apple Aphid (green apple aphid), Pear Leaf Blister Mite, Rosy Apple Aphid, Tarnished Plant Bug, Woolly Apple Aphid: Use 1 kg in 1000 litres of water (4.5 kg per hectare). Apply as recommended by local authorities. Do not make more than 2 applications after calyx. Do not apply within 15 days of harvest. **Codling Moth, Pear Psylla, Rust Mites:** Use 1.5 kg in 1000 litres of water (6.75 kg per hectare). Apply as recommended by local authorities. Do not apply within 15 days of harvest. **Apple Aphid (green apple aphid), Leafhoppers, Lygus Bugs, Rosy Apple Aphid:** Use 0.75 kg in 1000 litres of water (3.25 kg per hectare). BRITISH COLUMBIA: Apply according to Provincial recommendations. Do not apply within 15 days of harvest. **Pear Leaf Blister Mite, Rust Mites, Woolly Apple Aphid:** Use 1.0 kg in 1000 litres of water (4.5 kg per hectare). BRITISH COLUMBIA: Apply according to Provincial recommendations. Do not apply within 15 days of harvest.

APRICOT, CHERRY, PEACH, PLUM- Black Cherry Aphid, Eye-Spotted Bud Moth, Green Peach Aphid, Leafhoppers, Mealy Plum Aphid, Peach Silver Mite, Plant Bugs, Plum Rust Mite, Stink Bugs, Twig Borers: Use 0.75-1.0 kg in 1000 litres of water (3.25-4.5 kg per hectare). Apply as recommended in local government spray calendar. Do not make more than 2 applications during the fruiting season. Do not apply within 15 days of harvest. **Lesser Peachtree Borer, Peachtree Borer (root borer):** Use 1.5 kg in 1000 litres of water. Spray trunk and main scaffold limbs thoroughly. In Eastern Canada, spray 5 to 10 days after first curculio spray, and again 3 and 6 weeks later. In British Columbia, make 2 applications only. Do not apply within 15 days of harvest.

GRAPE- Leafhoppers: Use 1 kg in 1000 litres of water. BRITISH COLUMBIA: Treat when leafhoppers hatch. Apply 2500 litres of spray per hectare. Do not apply within 30 days of harvest. **Grape Phylloxera (leaf form):** Use 1 kg in 1000 litres of water. ONTARIO: Apply in regular post bloom spray and in first cover spray. Use 2500 litres of spray per hectare. Do not apply within 30 days of harvest.

STRAWBERRY*- Cyclamen Mite: Use 4.5-9.0 kg per hectare. Apply before bud formation. Repeat after harvest if necessary. Use higher rates for dense foliage. For heavy mite infestations, topping of plants before postharvest treatment may be advisable. Apply 4000-8000 litres of spray per hectare. Do not apply within 7 days of harvest. Do not apply when bees are working in field. **Tarnished Plant Bug:** Use 2.25 kg per hectare. Apply at first bloom and repeat 10 days later. Do not apply within 7 days of harvest. Do not apply when bees are working in field. **Strawberry Aphid:** Use 2.25 kg per hectare. Apply when insects are first noticed. Repeat as necessary. Do not apply within 7 days of harvest. Do not apply when bees are working in field. **Meadow Spittlebug:** Use 2.25 kg per hectare. Apply as soon as possible after eggs hatch. Do not apply within 7 days of harvest. Do not apply when bees are working in field.

*NOTE: Geese may be used for weeding 24 hours after treatment. Such geese may be used for human consumption after 2 months following the last application.

BEANS- Bean Aphid, Mexican Bean Beetle, Potato Leafhopper: Use 1.1-1.5 kg per hectare. Apply sprays in sufficient water to cover. Repeat as necessary. Treat upper and lower leaf surfaces. Do not apply within 2 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings). Do not use on lima beans.

BROCCOLI, BRUSSEL SPROUT, CABBAGE, CAULIFLOWER- Aphids, Cabbage Looper, Diamondback Moth (larvae), Flea Beetles, Imported Cabbageworm: Use 1.1-1.75 kg per hectare. Apply when first signs of feeding appear. Repeat as necessary. Use the lower rates for small larvae. Do not apply within 7 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings).

RUTABAGA, TURNIP- Aphids, Cabbage Looper, Diamondback Moth, Flea Beetles, Imported Cabbageworm: Use 1.75 kg per hectare. Apply when insects first appear. Do not feed treated foliage to livestock; roots may be fed. Do not apply within 45 days of harvest. Do not apply more than twice per season.

CUCUMBER, MELONS, PUMPKIN, SQUASH- Aphids, Cucumber Beetles, Potato Flea Beetle, Squash Vine Borer: Use 1.1 kg per hectare. Apply when insects first appear. Repeat as necessary. For squash vine borer make 4 applications to base and stem of the plant at 7 day intervals beginning in late June. Do not apply within 2 days of harvest.

EGGPLANT, PEPPER, TOMATO- Colorado Potato Beetle, Flea Beetles, Green Peach Aphid, Hornworms, Leafhoppers, Pepper Maggot: Use 1.1 kg per hectare. Apply when insects first appear. Repeat as necessary. Do not apply within 2 days of harvest. Tomato Fruitworm: Use 2.25 kg per hectare. Apply when insects first appear. Repeat as necessary. Do not apply within 7 days of harvest.

CUCUMBER (GREENHOUSE), TOMATO (GREENHOUSE)- Aphids, Greenhouse Whitefly: Use 1.1-1.5 kg per hectare. Spray when insects are first observed. Repeat as necessary. Do not apply within 2 days of harvest.

POTATO- Aphids, Colorado Potato Beetle, Leafhoppers, Potato Flea Beetle, Tuber Flea Beetle: Use 1.1 kg per hectare. Apply when insects first appear. Repeat as necessary. May be applied up to the day before harvest. Cull potatoes may be fed to livestock. Do not ensile or feed crop refuse (vines, tops, stocks or threshings). **Tarnished Plant Bug:** Use 1.75 kg per hectare. Apply when insects first appear. Repeat as necessary. May be applied up to the day before harvest. Cull potatoes may be fed to livestock. Do not ensile or feed crop refuse (vines, tops, stocks or threshings).

PEAS (CANNING, SEED)- Pea Aphid, Pea Weevil: Use 1.1-1.75 kg per hectare. Treat only if crop is to be mechanically harvested by combine. Apply when insects first appear and as necessary. Apply not more than twice per year on peas for canning. Do not apply within 7 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings).

CORN (FIELD), CORN (SWEET)- Corn Leaf Aphid: Use 2.25 kg per hectare. Apply when aphids are first noticed and repeat as necessary. Do not apply within 7 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings). Do not apply more than twice per season. Do not apply within 50 days of harvest on commercially grown corn; crop refuse may be fed to livestock. **Corn Earworm:** Use 2.25-3.25 kg per hectare. Apply to the silk as recommended by the local authorities. Do not apply within 7 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings). Do not apply more than twice per season. Do not apply within 50 days of harvest on commercially grown corn; crop refuse may be fed to livestock.

CELERY, LETTUCE (HEAD, FIELD), SPINACH- Aphids, Cabbage Looper, Imported Cabbageworm, Tarnished Plant Bug: Use 1.75 kg per hectare. Do not apply more than once on spinach or more than 3 times on lettuce. Trim celery at harvest. Do not apply to greenhouse lettuce. Do not apply within 14 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings).

JAPANESE YEW- Black Vine Weevil: Use 1.50 kg in 1000 litres of water. Spray lower branches and soil in early July.

FOOD PROCESSING PLANTS (OUTDOOR AREAS)- Sap Beetle (Glischronchilus quadrisignatus): Use 450 grams per 22.5 kg of bait. Chop or grind immature sweet corn, including the cobs, or bananas and mix with the product. Place bait on a disposable pie plate and cover with a second perforated plate. Distribute bait traps at 15.2 meters intervals around the area where beetles are a problem. Renew bait weekly. Do not broadcast bait.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Poisonous if swallowed, inhaled, or absorbed through the skin. Avoid breathing spray mist or dust. Avoid contact with skin, eyes, or clothing. Wash with soap and water before eating, drinking or smoking. Change to clean clothing and wash contaminated clothing before reuse. Do not contaminate any body of water. Do not apply or allow to drift to areas occupied by unprotected persons or animals. When spraying in greenhouses, and during commercial or prolonged exposure in mixing and loading operations, wear synthetic rubber gloves and a respirator approved for endosulfan protection such as American Optical Respirator 5058 or Willson Agritox Respirator. Do not contaminate feed or food. Do not store near foodstuffs, fertilizers, seed, and like commodities. Highly toxic to fish. Moderately toxic to bees. Causes severe injury to Concord grapes. Some injury to lima beans, geraniums, and chrysanthemums. Emulsion formulations injure European white birch.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at: www.croplife.ca.

FIRST AID

If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice. If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice. If swallowed, Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. Take container, label or product name and Pest Control Product Registration Number with you, when seeking medical attention.

TOXICOLOGICAL INFORMATION

Endosulfan is a central nervous system stimulant. There is no specific antidote. If patient is convulsing, give amobarbital-sodium or thiopental-sodium intravenously. Otherwise phenobarbital (0.06 to 0.10 gram) may be given orally. Do not use oily laxatives as they increase absorption. Do not give stimulants. Patient should be under medical observation for at least 24 hours in any case of suspected intoxication. Electroencephalogram may show abnormal alpha-wave activity.

SYMPTOMS OF POISONING

Nausea, headache, general feeling of being unwell, weakness and generalized convulsions.

DECONTAMINATION AND DISPOSAL

SPILLS: For spilled powder, spread with sawdust or dirt to prevent scattering. Apply sodium carbonate, caustic soda or hydrated lime on contaminated area. After one hour collect with a shovel or a broom and wash paved areas with water. For spilled liquid, decontaminate with any of above alkaline chemicals and allow to stand for one hour. Apply sawdust, talc, or sand to absorb all liquid. Decontaminate tools with hydrated lime.

DISPOSAL: Triple rinse the emptied bag and add the rinsings to the spray mixture in the tank. Follow provincial instructions for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

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