

CANADIAN LABEL

GROUP

2A

INSECTICIDE



Thionex[®] EC INSECTICIDE

An emulsifiable formulation for insect control
on vegetables, fruit and field crops.

GUARANTEE

Endosulfan 400g/L

REGISTRATION NO. 23453

PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

DANGER  **POISON**

KEEP OUT OF REACH OF CHILDREN

Net Contents: 10 Litres



Makhteshim Agan of North America, Inc.
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New York, NY 10176
1-212-661-9800

Specimen Label

Thionex EC is an emulsifiable insecticide which can be combined with most commonly used fungicides, adjuvants and other insecticides. Used only on those crops as specified on the label.

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

DO NOT APPLY BY AIR.

GROUND APPLICATION ONLY: Fill spray tank nearly full and pour recommended amount of Thionex EC on the surface of the water. 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 100-300 L/ha of water for thorough coverage. Use rate per hectare is given for specific use.

Product Specific Precautions: If you have questions call the manufacturer at 212-896-4900 or obtain other technical advice from the distributor at 519-268-8001, or your provincial agricultural representative.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that Thionex EC contains a Group 2A insecticide. Any insect population may contain individuals naturally resistant to Thionex EC 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 EC 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 212 661-9800 or 866-626-2462 (toll-free).

STRAWBERRY* - Cyclamen mite: Use 5 litres of product in 4000-8000L of water per hectare. Apply before bud formation. Repeat after harvest if necessary. Use higher rates for dense foliage. For heavy infestations, topping of plants before postharvest treatment may be advisable. Do not apply within 7 days of harvest. Do not apply when bees are working in the field. **Tarnished plant bug:** Use 2.5 litres of product in 2000L water 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 the field. **Strawberry aphid:** Use 2.5 litres of product in 2000L of water 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 the field. **Meadow spittlebug:** Use 2.5 litres of product in 2000L water 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 the 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 1.5-2.5 litres of product 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) to livestock. Do not use on lima beans.

SUGARBEET - beet webworm, green peach aphid: Use 2.0-2.75 litres of product per hectare. Apply when insects first appear. Do not apply within 45 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings) to livestock. Do not apply more than once per season.

BROCCOLI, BRUSSEL SPROUTS, CABBAGE, CAULIFLOWER - aphids, cabbage looper, diamondback moth (larvae), flea beetles, imported cabbageworm: Use 1.5-2 litres per hectare. Apply when first sign of feeding appears. Repeat as necessary. Use the lower rates for small larvae or flea beetles. Use the higher rates for aphids and large larvae. Do not apply within 7 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings) to livestock.

RUTABAGA, TURNIP - aphids, cabbage looper, diamondback moth, flea beetles, imported cabbageworm: Use 2 litres of product 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 1.5 litres of product 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, tomato fruitworm: Use 1.5-2.5 litres of product per hectare. Apply when insects first appear. Repeat as necessary. Use higher rate for Colorado potato beetle. For fruitworms, use 3 litres per hectare. Do not apply within 2 days of harvest.

CUCUMBER (Greenhouse), TOMATO (Greenhouse) - aphids, greenhouse whitefly: Use 1.25 litres of product per hectare. Spray when insects are first observed. Repeat as necessary. Do not apply within 2 days of harvest. See statement on the cover for personal protection equipment required for greenhouse applications.

POTATO - aphids, Colorado potato beetle, leafhoppers, potato flea beetle, tuber flea beetle: Use 1.5 litres of product 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) to livestock. **Tarnished plant bug:** Use 2.0 litres product per hectare. Apply when insects first appear. 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) to livestock.

PEA (Canning, Seed) - pea aphid, pea weevil: Use 1.5-2 litres of product 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 ensile or feed crop refuse (vines, tops, stocks or threshings) to livestock. Do not apply within 7 days of harvest.

CORN (Field and Sweet) - corn leaf aphid: Use 2.75 litres of product per hectare. Apply when aphids are first noticed and repeat as necessary. Do not ensile or feed crop refuse (vines, tops, stocks or threshings) to livestock. 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 2.75 to 4 litres per hectare. Apply to the silk as recommended by local authorities. Do not ensile or feed crop refuse (vines, tops, stocks or threshings) to livestock. 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 and Field), SPINACH - aphids, cabbage looper, imported cabbageworm, tarnished plant bug: Use 2.0 litres of product per hectare. Do not apply more than once on spinach or 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) to livestock.

ALFALFA, CLOVER - meadow spittlebug: Use 0.75 litre of product per hectare. Apply as eggs begin hatching. Do not feed forage to livestock within 30 days after application. Do not apply when bees are working in the field.

SUNFLOWER - sunflower beetle: Use 1.5 litres of product per hectare in 45-110 litres. Apply when the plants are 45 cm tall. Do not apply within 60 days of harvest. Do not ensile or feed crop refuse (vines, tops, stocks or threshings) to livestock. Do not apply more than once per season.

ORNAMENTALS (Greenhouse, Outdoors) - aphids, cyclamen mite, elm leaf beetle, greenhouse whitefly, rose chafer, spruce gall aphid: Use 1.25-1.75 litres of product in 1000 litres of water. Apply before flowering. Do not treat Bonnafon chrysanthemums and geraniums in the greenhouse or chrysanthemum cuttings within one month of planting. For spruce gall aphid, apply in early May. Do not use on birch trees. See statement on the cover for personal protection equipment required for greenhouse applications.

JAPANESE YEW - black vine weevil: Use 190 mL of product in 100 litres of water. Spray lower branches and soil in early July.

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 separately from other laundry before reuse. This product is very toxic to fish. Do not contaminate any body of water. Do not apply or allow to drift to areas occupied by unprotected persons or animals.

Workers must wear coveralls over long sleeved shirt and long pants and chemical resistant gloves during mixing, loading, application, clean up and repair. Mixer/loaders and greenhouse applicators must wear either a respirator with a NIOSH/MSHA/BHSE approved organic-vapour-removing cartridge with a prefilter approved for pesticides or a NIOSH/MSHA/BHSE approved canister approved for pesticides.

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.

Do not re-enter treated areas for 48 hours. If required, individuals may re-enter treated areas within 48 hours for short-term tasks not involving hand labour if at least 12 hours has passed since application and long pants, long sleeved shirt, hat and chemical resistant gloves are worn. No re-entry shall occur in treated greenhouse unless it has been ventilated or an approved respirator should be worn.

This product contains a petroleum distillate that is toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

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. contact 866-375-4648 (toll free) or www.cropro.org/

FIRST AID

IF ON SKIN: Remove contaminated clothing and wash skin thoroughly with soap and water.

IF IN EYES: Flush with a large volume of clean water for 15 minutes and go to nearest hospital IMMEDIATELY or contact a poison control centre at once.

IF SWALLOWED: Do not induce vomiting. Keep at rest. Get prompt medical attention or contact a poison control centre IMMEDIATELY.

IF INHALED and breathing is weak or irregular, remove patient from site of exposure and give artificial respiration. Get prompt medical attention or contact a poison control centre IMMEDIATELY. Do not give stimulants.

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. Symptoms of poisoning include: nausea, headache, general feeling of being unwell, weakness and generalized convulsions. 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.

DECONTAMINATION

Spills - For spilled liquid, apply sodium carbonate, caustic soda or hydrated lime on contaminated area and allow to stand for one hour. Apply sawdust, talc or sand to absorb all liquid. Collect with a shovel or a broom and wash paved areas with water. Decontaminate tools with hydrated lime.

DISPOSAL

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1) Triple-or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2) Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. For information on disposal or 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.

STORAGE

Store in a cool, dry place. Keep away from food, feed, fertilizers, seed and like commodities.

NOTICE TO USER

This control product is to be used only in accordance with the directions on this label. It is an offense under the Pest Control Products Act to use a control product under unsafe conditions.

NOTICE TO BUYER

Seller's guarantee shall be limited to the terms set out on the label, and subject there to the buyer assumes any risk to persons or property arising from the use of handling and accepts the product on that condition.