

PM 03

70051-5

5/11/99

Page 1 of 2

Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 2-28-95

	United States	<input type="checkbox"/> Registration	OPP Identifier Number
	Environmental Protection Agency	<input type="checkbox"/> Amendment	
	Washington, DC 20460	<input checked="" type="checkbox"/> Other	

Application for Pesticide - Section I

1. Company/Product Number 70051-5	2. EPA Product Manager J.L. Andersen A Layne	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Marosan-O	PM# 03	
5. Name and Address of Applicant (Include ZIP Code) Thermo Trilogy Corporation 9145 Guilford Road, Suite 175 Columbia, MD 21046 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input checked="" type="checkbox"/> Final printed labels in response to Agency letter dated _____	NOTIFICATION MAY 21 1999
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 Submission of a notification to incorporate language normally located on our commercial sub-label, which has already been approved by EPA on our master label dated April 14, 1999, onto our agricultural sub-label. We are also notifying EPA that we are adding the words "food crop" to the heading and the crops "Alfalfa" and "Other Crops Grown for Seed".

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal	<input type="checkbox"/> Plastic
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	No. per container
				<input type="checkbox"/> Glass	<input type="checkbox"/> Paper
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product		<input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Christine A. Dively	Title Director of Regulatory Affairs	Telephone No. (Include Area Code) (301) 483-3806
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamp)
2. Signature <i>Christine A. Dively</i>	3. Title Director of Regulatory Affairs	
4. Typed Name Christine A. Dively	5. Date May 17, 1999	

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Margosan-O®
Agriculture Use Sub-Label, 5/99
EPA Notification

MARGOSAN-O®
BOTANICAL AGRICULTURAL INSECTICIDE

An insecticide for use on food crops in and around agricultural areas and greenhouses.

Kills/repels a variety of insect pests including whiteflies, leafminers, caterpillars, aphids, and diamondback moths.

Broad Spectrum Insect Growth Regulator Insecticide

ACTIVE INGREDIENT:

Azadirachtin*.....	0.25%
INERT INGREDIENTS	99.75%
	TOTAL 100.00%

*Contains 0.017 pounds of azadirachtin per gallon.

KEEP OUT OF REACH OF CHILDREN
CAUTION

Manufactured By: Thermo Trilogly Corp.
9145 Guilford Road
Suite 175
Columbia, MD 21046

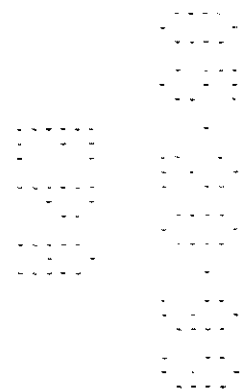
EPA Reg. No. 70051-5
EPA Est. NO. 44616-MO-01

Net Contents: 1 gal.

See Back Panel for Additional Precautionary Statements

NOTIFICATION

MAY 21 1999



**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

CAUTION: Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Avoid contamination of feed and foodstuffs. Avoid breathing spray mist. In case of eye contact, flush eyes with plenty of water. If on skin, wash with soap and water. If irritation persists, get medical attention.

Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinylchloride (PVC) or Viton.
- Shoes plus socks.

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.

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.
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Environmental Hazards:

This product may be hazardous to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean-high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters:

Physical and Chemical Hazards:

Flammable. Do not use or store near heat or open flame.

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STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal

Pesticide Storage: Keep in original container. Store in a cool, dry place, away from direct sunlight, feed or foodstuffs. Keep container tightly sealed when not in use. Do not store below 60°F (15°C) or above 95°F (35°C).

Pesticide Disposal: Rinsewater and unused diluted pesticide may be disposed of on-site or in an approved waste disposal facility. Do not reuse empty container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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 4 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
 - Chemical-resistant gloves, such as barrier laminate or butyl rubber or nitrile rubber or neoprene rubber or polyvinylchloride (PVC) or Viton.
 - Shoes plus socks.
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NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until spays have dried.

General

- Kills larval stages of insects only
- Broad Spectrum Multi-Purpose Botanical Insecticide Concentrate
- Shake well before using.
- Spraying directly onto the pest and a longer duration of leaf wetting increase effectiveness. Apply in early to mid-morning or late afternoon. This is particularly important with whitefly adults which are sedentary on the undersides of leaves at these times.
- Margosan-O® in diluted solution should be maintained at pH between 3-8. Use outside of this pH range may cause product degradation. Spray solutions should be used within several hours of preparation for maximum effectiveness. Do not store diluted solution for later use.
- Do not add adjuvants (spreaders, surfactants, etc.) to Margosan-O® as it already contains its own surfactant.
- Do not apply to wilted or otherwise stressed plants, or to newly transplanted material prior to root establishment. Do not apply to known spray-sensitive plants without testing.
- Margosan-O® has been found to be compatible when used in conjunction with most beneficial insects. It is recommended that a small trial be conducted to assure compatibility before using on a large scale.

Tank Mixing

Margosan-O® has been found to be compatible with most commonly used fungicides, insecticides, and fertilizers. Physical compatibility should first be checked by using the correct proportion of products in a small jar test. Growers should then test tank-mix combinations for phytotoxicity on a sample of plants prior to use. This is also recommended with combinations used before as environmental conditions can alter the interaction between compounds. Due to the wide variation in climatic conditions, cultural practices, and other factors, the user assumes full responsibility for any crop damage or other liability resulting from the use of Margosan-O® in a tank mix combination. Do not mix Margosan-O® with oxidizing agents such as bleach, or strong acids and bases as they will destabilize the product.

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Directions for Food Crop Application

General Directions

- Use care when applying near streams, ponds, lakes, or other bodies of water.
- Margosan-O® should not be applied when weather conditions favor drift or when the likelihood of runoff is high.

Greenhouse

- For use to control whiteflies, thrips, mealybugs, leafminers, loopers, caterpillars, beet armyworms, and aphids in and around greenhouses and commercial nurseries.
- Margosan-O® may be used on all listed fruits, vegetables, vegetable transplants, and herbs both inside and outside of the greenhouse.
- For high volume application, dilute Margosan-O® to a concentration of 64 to 128 ounces (4 to 8 pints) per 100 gallons of water (4 to 8 teaspoons of Margosan-O® per gallon of water). Mix thoroughly. Apply 25-40 psi with hand sprayer or 100-200-psi with power sprayer as a fine spray to both leaf surfaces to runoff. Usually 1-2 gallons of spray solution/1,000 sq. feet. Excessive application is unnecessary and should be avoided.
- For low volume application, apply at a rate of 0.5 gallon of Margosan-O® per 1000 square feet.
- Sprays may be applied on a preventative 7-day schedule or at the first sign of insect presence. This schedule is effective under low insect pressure. Under high insect pressure, apply every 3-4 days.
- For drench application in greenhouse planting, use 2.5 pints per 100 gallons and apply at the rate of 1 quart of diluted solution per square foot of growing media surface. Repeat at 14-day intervals during the growing season.

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Field Crops

Specific Crop Directions

Application Rate: Apply 0.5-2.0 gallons of Margosan-O® per acre using conventional application equipment in a minimum of 30 gallons of water. The low rate should be used as a preventative when pest pressure is low, or if used in conjunction with adulticide products. Otherwise, the high rate should be used. The maximum application rate is 20 grams of active ingredient or less per acre according to the tolerance exemption (40 CFR 180.1119).

Application Rate for Whiteflies, Aphids, Leafminers, Armyworms & Other Pests

Pest	Rate of Margosan-O Per Acre* (gallons)	Application Frequency	Remarks
Sweetpotato Whitefly -Low Pressure	0.5-1.0 gallons	4 – 10 days	Foliar application to larvae and nymphs
-High Pressure	1.0-2.0 gallons	3 – 7 days	
Aphids	0.5-1.0 gallons	7 – 10 days	Suppression and adult feeding deterrence
Leafminer	0.5-1.0 gallons	14 – 21 days	Foliar application to larvae and nymphs
Armyworms	0.5-1.5 gallons	7 – 10 days	Foliar application to larvae
Others (including): -Bores -Leafhoppers -Leafrollers -Loopers	1.0-2.0 gallons	7 – 10 days	Foliar application to larvae and nymphs

*Apply in sufficient water per acre to assure adequate coverage

Mode of Action

This product controls targeted insect larvae when ingested or come in contact with it, by interfering with the insects ability to molt. It is effective on all larval stages and pupae. It also reduces damage by repelling and deterring feeding of all stages of insects.

Crops including but not limited to:

CITRUS, POME, STONE, AND TROPICAL FRUITS	
Apples	Apricots
Avocados	Peaches
Pears	Oriental pears
Cherries-sweet	Cherries-sour
Barbados cherries	Plums
Prunes	
Crabapples	Quinces
Grapefruits	Jujubes
Kumquats	
Lemons	
Limes	
Mangoes	
Nectarines	
Oranges	
CUCURBITS	
Balsam pears	Honeydew melons
Mango	
Cantaloupes	Chinese waxgourds
Pumpkins	
Cucumbers	Squashes
Gherkins	Watermelons (incl. hybrids)
Gourds	
BULB, COLE AND LEAFY VEGETABLES	
Arugula	Cress
Asparagus	Endive
Broccoli	Fennel
Brussels sprouts	Kale
Cabbage (head & Leaf)	Kohlrabi
Cauliflower	Parsley
Celery	Rhubarb
Lettuce (head & leaf)	
Mustard greens (Gai Ion)	Swiss chard
Chinese cabbage (Bok choy, Napa)	Turnip tops
Spinach	Garlic
Chinese spinach (Amaranth, Tampala)	Leek
	Onions
	Shallots
	Collards

LEGUME AND FRUITING VEGETABLES

Beans
Chick peas
Eggplants
Ground cherries
Lentils
Peas
Peanuts
Peppers
Soybeans
Tomatoes

ROOT AND TUBER VEGETABLES

Artichokes
Beets
Carrots
Cassava
Ginger
Horseradish
Parsnips
Potatoes
Radishes
Rutabaga
Sweet potatoes

Tumeric
Turnips
Yams
Yam beans

SMALL FRUITS AND BERRIES

Blackberries
Blueberries
Boysenberries
Cranberries
Currants
Dewberries
Elderberries
Gooseberries
Grapes
Huckleberries
Loganberries
Raspberries (black
& red)
Strawberries
Youngberries

Insect Pest Controlled by Margosan-O®:

Aphids, such as:
Cotton Aphid
Green Peach Aphid

Armyworms, such as:
Beet Armyworm
Fall Armyworm
Southern Armyworm
Yellow Striped
True Armyworm

Borers, such as:
Peachtwig Borer
Peachtree Borer
Squash Vineborer

Caterpillars & Loopers, such as:
Cabbage Looper
Diamond Moth
Imported Cabbage Looper
Navel Orangeworm
Soybean Looper
Tobacco Budworm
Tomato Fruitworm
Grapeleaf Skeletonizer
Hornworm
Fall Webworm
Lesser Webworm
Pickleworm
Rindworm
Melonworm
Sod Webworm
Pecan Nut Casebearer
Walnut Caterpillar
Hickory Shuckworm

Corn Earworm
Budworm
Webworm
Garden Webworm

Cutworms, such as:
Black Cutworm
Citrus Cutworm

Leafhoppers, such as:
Grape Leafhopper
Potato Leafhopper
Variegated Leafhopper
Aster Leafhopper

Leafminers, such as:
Holly Leafminer
Sepentine Leafminer
Vegetable Leafminer

Leafrollers, such as:
Oblique Banded Leafroller
Omniverous Leafroller
Grape Leafroller
Fruitree Leafroller
Blueberry Leafroller
Filbert Leafroller

Moths, such as:
Artichoke Plume Moth
Codling Moth
Gypsy Moth
Diamondback Moth
Grape Berry Moth

Thrips, such as:
Thrips Palmi

Whiteflies, such as:
Greenhouse Whitefly
Silverleaf Whitefly
Sweetpotato Whitefly

Psyllids

Spittle Bugs

Mealybugs

Beetles, Grubs & Weevils, such as:

Pecan Weevils
Alfalfa Weevils
Chestnut Weevils
Colorado Potato Beetle
Black Vine Weevil
Twig Girdlers
Strawberry Beetle
Potato Flea Beetle
Bean Leaf Beetle
Mexican Bean Beetle

Miscellaneous, such as:

Fruitfly
Grasshopper
Onion Maggot
Tomato Pinworm
Cherry Fruitworm
Grape Fruitworm
Grape Leafroller
Filbert Worm
Squash Bug
Pecan Leaf Phylloxera
Pecan Stem Phylloxera
Bollworm
Cotton Leafperforator

