

PM 91

58866-11

1/21/99

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

1/21/1999

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

ProGuard, Inc.
c/o Ms. Kari Mavian
LEWIS & HARRISON
122 C Street N.W., Suite 740
Washington, DC 20001

SUBJECT: Cinnacure P1005™
EPA Registration No. 58866-11
First Food Use Label Amendment Submitted 4-17-98


Dear Ms. Mavian,

The label amendment referred to above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is acceptable, provided that you make the following label change:

In the section entitled "Statement of Practical Treatment", delete the sentence "For skin irritation, apply a topical ointment".

A stamped copy of the label is enclosed for your records. Five copies of the final printed label must be submitted prior to releasing the product for shipment.

Sincerely,

for 
Janet L. Andersen, Director
Biopesticides and Pollution
Prevention Division (7511C)

289

Rev. 12/07/98

CINNACURE™ P1005™

A Broad Spectrum Fungicide/Insecticide/Algaecide/Miticide for Use in Row Crops, Horticultural Crops and Turf

Controls Powdery Mildew, Rhizoctonia, Pythium, Dollar Spot, and Pitch Canker Disease.

Controls/repels a variety of pests including Aphids, Mites, Whiteflies (includes silverleaf and greenhouse), Thrips (including western flower), Algae, Moss, and Liverworts/Hornworts/Pearlworts

A Curative and Preventative Fungus Control

ACTIVE INGREDIENTS:

Cinnamaldehyde 5.0%

INERT INGREDIENTS: 95.0%

TOTAL 100.00%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

See back panel for additional precautionary statements.

STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and warm water. For skin irritation, apply a topical ointment. If irritation persists, consult a physician..

IF IN EYES: In case of contact, immediately flush eyes with plenty of water. Get medical attention if irritation persists.

EPA Reg. No. 58866-11 EPA Est. No. 58866-CA-1

International & United States Patents Pending

**PROGUARD INC.
SUISUN, CA 94585**

NET CONTENTS:

ACCEPTED
with COMMENTS
In EPA Letter Dated
JAN 21 1999
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA No.
58866-11

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

Harmful if absorbed through skin. Causes eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment:

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants.
2. Waterproof gloves.
3. Shoes plus socks.
4. Protective eyewear

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.

ENVIRONMENTAL HAZARDS

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 by cleaning of equipment or disposal of wastes.

PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flame.

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 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 also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE). 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, water is: Coveralls, waterproof gloves, shoes plus socks.

USER SAFETY RECOMMENDATIONS:

User should:

1. Wash hands before eating, drinking, chewing gum, using Tobacco or using the toilet.
2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

SHAKE WELL BEFORE USE. USE DILUTION IMMEDIATELY. DO NOT STORE DILUTED SOLUTION.

Pre-harvest Interval: CINNACURE™ may be applied to the crops listed in the APPLICATION RATE TABLE at any time, up to and including the day of harvest.

Mode of Action: CINNACURE™ is a contact insecticide/fungicide/algaecide/miticide.

CINNACURE™ is a pesticide for use against the insect and fungal pests listed in the APPLICATION RATE TABLE. The pest must come in contact with CINNACURE™ in order to be affected. Always follow these directions:

- Apply in early morning or late afternoon. This is especially important for the adult stages of whiteflies and thrips, which tend to be less active at these times.
- Spraying directly onto pest(s) or pathogen(s) increases effectiveness.
- Make applications before noticeable foliar damage occurs. Always apply as protectant for best disease control.
- Thorough spray coverage is essential for good pest control. For ground applications, directed drop nozzles should be used for certain vegetable crops.
- When insect infestations are heavy, use the higher label rates, shorten spray intervals and/or use larger total spray volume to improve spray coverage.
- Applications should be repeated at an interval sufficient to maintain control, depending upon plant growth, insect or fungal pressure and weather conditions after spraying.
- For crops such as Fruits, Nuts and Vines, applications are often timed to stage of development and recommendations from local Extension personnel should always be followed.
- Local conditions may affect the use of CINNACURE™. Consult your State Agricultural Extension Specialist for specific recommendations related to local crop protection problems.
- Spray water/spray tank solutions should not be below pH of 3.0 or exceed a pH of 8.0. CINNACURE™ works best in a pH range of 3.5 to 7.5. Use outside this range may cause product degradation. If necessary, buffer water to near neutral pH.
- Do NOT apply to wilted or obviously stressed plants, or to newly transplanted material prior to root establishment.
- Do NOT mix CINNACURE™ with oxidizing agents such as bleach or strong acids or bases as they will destabilize the product.
- CINNACURE™ has not been tested on all plant varieties or in all tank mixes. Test CINNACURE™ on a small number of plants for potential damage before applying to a larger number of plants.

HAND HELD EQUIPMENT

When using hand held equipment, mix 3 - 6.4 oz. of CINNACURE™ per gallon of water. Spray to wet, but not to runoff.

TANK MIX

CINNACURE™ has not been tested for use in a tank mix with many commonly used insecticides, fungicides, or spray tank adjuvants. It is advisable to test tank mix combinations for physical compatibility and plant safety. Consult your dealer or manufacturer for specific recommendations. This product cannot be mixed with any product containing a label prohibition against such mixing.

No label dosage rate should be exceeded. Application must be made in accordance with the more restrictive of label limitations and precautions. Read and follow label instructions.

• For improved durability of spray deposits, a spreader/sticker approved for use on growing crops may be used for hard-to-wet crops such as cole crops.

MIXING INSTRUCTIONS

CINNACURE™ may be applied with conventional ground or hand held application equipment with quantities of water sufficient to provide thorough coverage of infested plants. To obtain a suitable mixture with water, add enough water to allow maximum agitation. With agitator running, slowly add in the CINNACURE™. Continue agitation. Add remainder of water and other spray materials and agitate until mixed. Maintain suspension while loading and spraying. Do not mix more CINNACURE™ than can be used in a 12 hour period. Rinse and flush spray equipment thoroughly following each use. Do not contaminate water when disposing of equipment washwaters.

In order to make proper decisions on application rates to be used, follow the recommendations in the APPLICATION RATE TABLE.

APPLICATION RATE TABLE

VEGETABLE AND COLE CROPS

Insect Pests: Aphids, Thrips, Whitefly, Spider Mites, Lygus Bug, Squash Bug, Heliothis, Box Elder Bugs, Tomato Pin Worm, Cabbage Looper, Stink Bugs, Lepidoptera and Fruit Worms.

Fungal Pests: Powdery mildew, Botrytis and Downey mildew.

Crops such as: Artichokes, Arugala, Asparagus, Beans, Beets, Bok Choy, Broccoli, Brussels Sprouts, Cabbage, Cardoni, Carrots, Cauliflower, Celeriac, Celery, Chick Peas, Chickory, Chinese Cabbage, Collards, Cucumber, Cucurbits, Dry bulb onions, Eggplants, Escarole, Endive, Garlic, Green onions, Greens (Beets, China, Dandelion, Mustard, Turnip), Horseradish, Kale, Kohlrabi, Leeks, Lentils, Lettuce (Head, Romaine, Leaf), Malanga, Melons, (Cantaloupe, Crenshaw, Honeydew, Muskmelon, Watermelon, etc.), Napa, Okra, Onions, Parsley, Parsnips, Peas, Peppers, Potatoes, Pumpkins, Radishes, Rutabaga, Salsify, Shallots, Soybean foliage, Spinach, Squash, Sugar beets, Sweet potatoes, Swiss chard, Tomatoes, and Turnips.

Recommended Rate:

Mix $\frac{3}{4}$ - 1 $\frac{1}{4}$ gallons of CINNACURE™ in 10-30 gallons of water. Apply 10-30 gallons of diluted CINNACURE™ solution per acre. Apply CINNACURE™ every 7-10 days when disease pressure is high. Begin applications before disease onset. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

FRUIT, CITRUS AND NUT CROPS

Insect Pests: Aphids, Thrips, Spider Mites, Codling Moth, Apple Scab, Peach Twig Borer, Leaf Hopper, Scale Insects, Apple Maggot adults, Leaf Roller, Tent Caterpillars, Walnut Husk Fly adults, Ants, Whitefly and Mealy bug.

Fungal Pests: Brown rot and Botrytis.

Crops such as:

Pome and Stone Fruit Trees

Apples, Apricots, Cherries, Nectarines, Peaches, Pears, Plums, Prunes, Quince, and Persimmons.

Crops Such as:

Citrus

Lemon, Orange, Grapefruit, Lime, and Kumquat.

Crops such as:

Nut Trees

Almonds, Chestnuts, Filberts, Pecans, Pistachios, and Walnuts.

Recommended Rate:

Mix 6 - 18 gallons of CINNACURE™ in 100-300 gallons of water. Apply 100-300 gallons of diluted CINNACURE™ solution per acre. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

HERBS AND SPICES

Insect Pests: Aphids, Thrips, Whitefly, Spider Mites, and Mealy Bug.

Fungal Pests: Powdery Mildew, Botrytis, and Downey mildew.

Crops such as: Basil, Chives, Cilantro, Dill, Oregano, Peppermint, Rosemary, Sage, Spearmint, and Thyme.

Recommended Rate:

Mix ¼ - 1 ¼ gallons of CINNACURE™ in 10-30 gallons of water. Apply 10-30 gallons of diluted CINNACURE™ solution per acre. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

SMALL FRUIT AND BERRIES

Insect Pests: Aphids, Thrips, Whitefly, Spider Mites, Leafhoppers, Lygus Bug, Long Horned Stem Borer, and Blueberry Maggot.

Fungal Pests: Powdery Mildew, Botrytis, and Downey Mildew.

Crops such as: Blackberries, Blueberries, Boysenberries, Cranberries, Currants, Loganberries, Raspberries, and Strawberries.

Recommended Rate:

Mix 6 - 12 gallons of CINNACURE™ in 100-200 gallons of water. Apply 100-200 gallons of diluted CINNACURE™ solution per acre. Use at 10 day intervals. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

GRAPES & KIWI

Insect Pests: Aphids, Thrips, Whitefly, Spider Mites, Leafhopper, Lygus Bug, Leaf Roller, Grape Berry Moth, and Mealy Bugs.

Fungal Pests: Powdery Mildew, Downey Mildew and Botrytis.

Recommended Rate:

Mix 6 - 18 gallons of CINNACURE™ with 100-150 gallons of water. Apply 100-150 gallons of diluted CINNACURE™ solution per acre. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

For Insect Control: The recommended rate is 2 gallons of CINNACURE™ mixed in 150 gallons of water. Apply 150 gallons of diluted CINNACURE™ solution per acre. Apply as frequently as necessary to obtain insect control.

For Powdery Mildew Control: Apply at 7-14 day intervals. Use 7 day interval when disease pressure is high, greater than 60 index points on the UC Davis Risk Assessment Index (UCDRAI), and use 14 day intervals when UCDRAI is 0 to 30 index points. The recommended application rate is 2 gallons of CINNACURE™ mixed in 150 gallons of water. Apply diluted CINNACURE™ solution at 150 gallons per acre. Increase concentrations when disease pressure is high, and reduce concentrations when disease pressure is low.

PASTURE AND HAY

Insect Pests: Aphids, Thrips, Spider Mites, Alfalfa Weevil larvae, Alfalfa Caterpillar, Armyworm, Leaf Hoppers and Lygus Bug.

Fungal Pests: Downey mildew.

Crops such as: Alfalfa (hay and seed), Pasture (grasses and hay), and Silage.

Recommended Rate:

Mix $\frac{3}{4}$ - 1 $\frac{3}{4}$ gallons of CINNACURE™ with 10-30 gallons of water. Apply 10-30 gallons of diluted CINNACURE™ solution per acre. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

TROPICAL AND OTHER FRUIT

Insect Pests: Aphids, Leafhoppers, Thrips, Whitefly, Spider Mites, and Mealy Bugs.

Fungal Pests: Downey mildew, Powdery mildew and Botrytis.

Crops such as: Avocados, Bananas, Dates, Figs, Mangoes, Papaya, Pomegranate, and Pineapple.

Recommended Rate:

Mix 6 - 18 gallons of CINNACURE™ in 100-150 gallons of water. Apply 100-150 gallons of diluted CINNACURE™ solution per acre. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

FIELD CROPS

Insect Pests: Aphids, Caterpillars, Thrips, Whitefly, Spider Mites, Tobacco Horn Worm, and Leaf Hopper.

Fungal Pests: Rust and Powdery mildew.

Crops such as: Canola/Rape Seed, Evening Primrose, Meadow Foam, Corn (Field, Sweet and Popcorn), Cotton, Hops, Jojoba, Rice, Safflower, Small Grains (Barley, Oats, Rye, Wheat, etc.), Sorghum, Soybeans, Sunflowers, and Tobacco.

Recommended Rate:

Mix $\frac{3}{4}$ - 1 $\frac{3}{4}$ gallons of CINNACURE™ with 10-30 gallons of water. Apply 10-30 gallons of diluted CINNACURE™ solution per acre. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

COMMERCIAL FLOWERS AND ORNAMENTAL PLANTS

Insect Pests: Aphids, Thrips, Whitefly, Spider Mites, Mealy Bug, and Caterpillar larvae.

Fungal Pests: Powdery mildew, Botrytis, and Downey Mildew.

Crops such as: Bedding Plants, Flowers (Greenhouse and field), Greenhouse ornamentals, Greenhouse vegetables, Bare Root Stock, Container stock, Fresh Cut Flowers, Ornamental Starts, Roses, Vegetable and Fruit Starts.

Recommended Rate:

Mix 2 - 4 $\frac{3}{4}$ gallons of CINNACURE™ in 100 gallons of water. 100 gallons of diluted CINNACURE™ solution treats 10,000-20,000 square feet. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

For Control of mites and aphids: Mix 3 .5 gallons of CINNACURE™ in 100 gallons of water. 100 gallons of diluted CINNACURE™ solution treats 10,000-20,000 square feet.

For Powdery mildew control: Apply when disease first appears Mix 3 - 4 $\frac{3}{4}$ gallons of CINNACURE™ in 100 gallons of water. 100 gallons of diluted CINNACURE™ solution treats 10,000-20,000 square feet. Apply as a thorough foliar spray including the underside of the leaves. Repeat as necessary. As a preventative measure, apply at three week intervals.

FOREST, SHADE TREE AND NURSERY STOCK

Insect Pests: Aphids, Thrips, Whitefly, Spider Mites, Stem Borer, and Tent Caterpillar.

Fungal Pests: Pitch Canker (*Fusarium subglutinans f. sp. pini*)

Crops such as: Forest, Shade trees, Nursery trees, and Pine trees.

Recommended Rate:

Mix 6- 18 gallons of CINNACURE™ in 100-300 gallons of water. Spray to thoroughly wet trees. 100-300 gallons of diluted CINNACURE™ solution typically treats 10,000-20,000 square feet.

For Pitch Canker Disease: use 40 gallons of CINNACURE™ per 200 gallons of water. All applications should be preceded by a phytotoxicity check to ensure that the material is safe for that particular plant variety.

TURF

Fungal Pest: Rhizoctonia, Pythium, and Dollar Spot.

Crops such as: Turf, Turfgrass.

Recommended Rate: Dilute $\frac{3}{4}$ - 1 $\frac{3}{4}$ gallons of CINNACURE™ per 100 - 300 gallons of water (Apply at 305 gallons of dilute solution per acre (7 gallons of solution per 1,000 sq. ft.). As a preventative treatment, apply when conditions are favorable for disease development or apply when disease first appears. Avoid overlapping of sprays. Repeat as necessary.

Since there are several bentgrasses on golf course greens that may differ in phytotoxicity response, it is recommended that application be preceded by a phytotoxicity check to ensure that the material is safe for that particular variety.

PLANT PARASITE CONTROL

(Algae, Algae Scum and Moss)

Turf

For prevention or eradication of algae, algae scum or moss, dilute 6 - 10 gallons CINNACURE™ per 100 - 300 gallons of water. Apply 305 gallons per acre (7 gallons per 1,000 sq. ft.), apply on a 28 day schedule. When algae, algae scum or moss is well established, every attempt should be made to dry out the afflicted areas. Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with treatment. Under severe algae, algae scum or moss conditions, use a higher rate and apply on a 14 day schedule. Only a preventative program of treatment will prevent a recurrence of the algae, algae scum or moss when environmental conditions are favorable for growth.

Greenhouse (glasshouse)

For prevention or eradication of algae, algae scum, moss, liverworts, hornworts or pearlwarts on glass, other glasshouse surfaces or in containers, pots or storage bins; apply at a rate of 7 fluid oz./1gal of water as needed. When algae, moss or liverworts are well established, every attempt should be made to dry out the afflicted areas. Do not spray directly on glasshouse plants. Spray in a manner that minimizes contact with desired plants. Only a preventative program of treatment will prevent a recurrence of the algae, moss, liverwort, hornwort or pearlwort when environmental conditions are favorable for growth.

Structural or Decorative Surfaces

For prevention or eradication of algae and moss on residential structures (e.g., wood and/or concrete walls, steps, stairs, foundation, seats, walkways, etc.), apply at the rate of 12 fluid oz./1 gallon of water as needed. When algae or moss is well established, every attempt should be made to dry out the afflicted areas. Do not spray on plants, animals or plastic surfaces. Only a preventative program of treatment will prevent a recurrence of moss, liverwort, hornwort or pearlwort when environmental conditions are favorable for algae or moss growth.

Moss and liverworts/hornworts/pearlworts in Containers, Pots or Storage Bins

For prevention or eradication of moss, liverworts, hornworts and pearlwarts in containers, pots or storage bins, apply at the rate of 7 fluid oz./1 gallon of water as needed. When moss, liverworts, hornworts and pearlwarts are well established, every attempt should be made to dry out the afflicted areas. Do not spray on plants, animals, or plastic surfaces. Only a preventative program of treatment will prevent a recurrence of moss, liverwort, hornwort or pearlwort when environmental conditions are favorable for growth.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Store in original container. Store in a cool dry place. Use within 10 days of opening container. Do not store near food or feedstuffs.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: 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.