

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



OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

OCT 24 2003

Ms. Diane Allemang
Cheminova, Inc.
600 13th St., NW
Washington, DC 20005

Dear Ms. Allemang:

Subject: Labeling Submitted in Response to the Chlorpyrifos IRED
Cyren® MUC
EPA Reg. No. 4787-37
Cyren® RT
EPA Reg. No. 4787-38
Cyren® 150 Concentrate
EPA Reg. No. 4787-39
Chlorpyrifos Technical
EPA Reg. No. 4787-40 ✓
Nufos® Technical
EPA Reg. No. 4787-41
Your Submissions Dated April 11, 2003

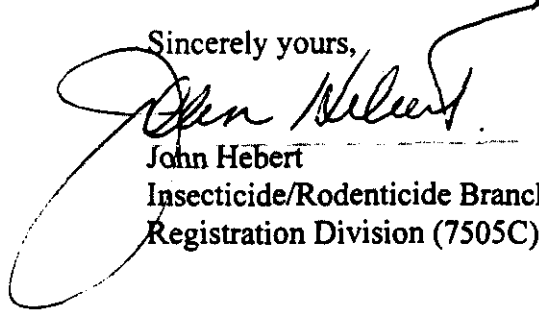
The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable provided you make the following change before you release the product for shipment bearing the amended labeling:

- Revise section A(ii)(a) by deleting the 2 day REI for "tree nuts and sweet potatoes." The correct REI for these crops is 24 hours. Also, add a 3 day REI for cauliflower.

Approval of this labeling amendment does not constitute approval of your application for reregistration of this product. Product reregistration is currently pending and future labeling amendments and/or additional data may be required.

Submit two copies of your final printed labeling before you release the product for shipment. A stamped copy is enclosed for your records. If you have any questions, please contact me at (703) 308-6249 or hebert.john@epa.gov.

Sincerely yours,

A handwritten signature in black ink, appearing to read "John Hebert", written over a horizontal line. The signature is fluid and cursive.

John Hebert
Insecticide/Rodenticide Branch
Registration Division (7505C)

c: Venus Eagle, SRRD
Tom Myers, SRRD

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ACCEPTED
with COMMENTS
In EPA Letter Dated:

OCT 24 2003

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

4787-90

Chlorpyrifos Technical

AN INSECTICIDE FOR MANUFACTURING USE ONLY

ACTIVE INGREDIENT:

Chlorpyrifos: O,O-diethyl-O-(3,5,6-trichloro-2-pyridinyl) phosphorothioate

98.5%

INERT INGREDIENTS:

1.5%

TOTAL:

100.0%

This product contains 11.84 pounds of chlorpyrifos per gallon.

**BEFORE USING THIS PESTICIDE
STOP - READ THE LABEL**

**KEEP OUT OF REACH OF CHILDREN
WARNING AVISO**

May be fatal if swallowed, inhaled or absorbed through skin. Causes eye irritation. May cause skin irritation. Do not get in eyes, on skin or on clothing. Avoid breathing dust. Handle chemical in a ventilated area. Wear protective clothing and chemical resistant gloves (such as nitrile, butyl, neoprene, and/or barrier laminate) when handling. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Keep away from food, feedstuffs and water supplies.

AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. (TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

IN CASE OF AN EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-800-228-5635, EXT. 153.

FIRST AID

Contains an organophosphate that inhibits cholinesterase.

IF SWALLOWED: Call a poison control center 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 center or doctor. Do not give anything by mouth to an unconscious person.

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 center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product label or container with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-228-5635 ext. 153 for emergency medical treatment information.

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NOTE TO PHYSICIAN: Chlorpyrifos is a cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. Antidote: Administer atropine sulphate in large doses, TWO to FOUR mg intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-PAM chloride is a pharmacological antidote and may be administered as an adjunct to, but not a substitute for, atropine, which is a symptomatic and often lifesaving antidote. **DO NOT GIVE MORPHINE OR TRANQUILIZERS.** At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Continued absorption of **chlorpyrifos** may occur and relapse may occur after initial improvement. **VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS.**

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No.: 4787-40

Product of Denmark

EPA Est. No.: 4787-DN-1



CHEMINOVA A/S • Lemvig • Denmark
Phone (+45) 96 90 96 90 • Telex 66514 • Fax (+45) 96 90 96 91

Net Contents: 288 Kilos (635 lbs)

PRECAUTIONARY STATEMENTS

**HAZARDS TO HUMAN AND DOMESTIC ANIMALS
KEEP OUT OF REACH OF CHILDREN.**

WARNING AVISO

May be fatal if swallowed, inhaled or absorbed through skin. Causes eye irritation. May cause skin irritation.

Do not get in eyes, on skin or on clothing. Avoid breathing dust. Handle chemical in a ventilated area.

Wear protective clothing and chemical resistant gloves (such as nitrile, butyl, neoprene, and/or barrier laminate) when handling. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Keep away from food, feedstuffs and water supplies.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

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

Storage: Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F (38°C) for extended periods of time. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site, if approved waste handling facilities are available, 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 by other procedures approved by state and local authorities.

After October 1, 2000, any manufacturing-use product formulated from this product must bear EPA-approved labeling that is consistent with the terms of the June 7, 2000, memorandum of agreement between EPA and registrants of pesticide products containing chlorpyrifos.

Only for formulation into an *insecticide* for the following use(s). Text in [square brackets] after each site category heading refers to the general use group as referenced in 40 CFR 158.

Agricultural Uses

If the product is labeled for reformulation into products bearing labeling for agricultural uses, the label may not contain instructions permitting formulation into products registered for tomatoes. In addition, the label must contain the following statements:

- "(i) Use of this product for formulation into any end-use product bearing instructions for use on apple trees is prohibited unless the end-use product bears EPA-approved labeling prohibiting post-bloom application to apple trees.
- (ii) (a) This product may only be formulated for the agricultural uses listed below if the EPA-approved labeling of the formulated product bears revised worker reentry intervals (REIs) of a duration no less than the following:
 - * For all crops: 24 hours, unless specifically noted as otherwise below
 - * Tree nuts and sweet potatoes: 2 days
 - * Fruit trees: 4 days
 - * Citrus trees: 5 days
- (b) The end-use product labeling may include the following statement: 'Certified crop advisors or persons entering under their direct supervision under certain circumstances may be exempt from the early reentry requirement pursuant to 40 CFR Part 170.'
- (iii) Any emulsifiable concentrate (EC) end-use product formulated from the product must be labeled as a restricted use product. All other end-use products formulated from the product must either be labeled as restricted use or packaged in containers no smaller than 15 gallons of a liquid formulation, 50 pounds of a granular formulation, or 25 pounds of any other dry formulation."

Agricultural Crops [Terrestrial Food Crop, Greenhouse Food Crop]:

- * Alfalfa; apple (post-bloom application prohibited); asparagus; banana; beet (sugar, garden/table, including crops grown for seed); blueberry; **Brassica (cole) leafy vegetables** (including but not limited to: bok choy, broccoli, broccoli raab, Brussels sprouts, cabbage, cauliflower, Chinese

cabbage, collards, kale, kohlrabi); caneberry; cherimoya; cherry (sour, sweet); **citrus fruits** (including but not limited to: grapefruit, lemon, orange, citrus orchard floors); corn (field corn, sweet corn (including corn grown for seeds)); cotton; cranberry; cucumber; date; feijoa; fig; grape; kiwifruit; leek; **legume vegetables (succulent or dried)** (including but not limited to: snap beans, lima beans, peas, soybeans); mint; mushroom; nectarine; onion (dry bulb); peach; peanuts; pear; pepper; plum; prune; pumpkin; radish (including crops grown for seed); rutabaga; sapote; sorghum (milo); strawberry; sugarcane; sunflower; sweet potato; tobacco; **tree nuts** (including but not limited to: almonds, filberts, pecans, walnuts, almond orchard floors); turnip; wheat.

Agricultural Crops [Terrestrial Non-Food Crop]:

- * Clover and grass grown for seed (see note).

Note: Clovers and grasses which are grown for seed are only for 24(c) registration as terrestrial non-food crops. The 24(c) labeling for these sites must include the following limitations:

- 1) Limit use to the crop establishment year only.
- 2) Prohibit use of any portion of the treated field for animal feed.
- 3) Restrict harvest until 365 days after application.

Livestock [Indoor Food]:

- * Cattle ear tags, non-residential animal housing including but not limited to poultry houses and other livestock housing (feedlots, corrals, stockyards, holding pens, and other outdoor livestock holding areas).

Ornamentals - Commercial Production Only [Commercial Terrestrial Non-Food, Commercial Greenhouse Non-Food]:

- * Soil treatment of potted, containerized, or balled and burlapped nursery stock plants in nurseries and greenhouses only.
- * Flowers, shrubs, evergreens, vines, shade and flowering trees in nurseries or greenhouses only.
- * Forest tree nurseries.
- * Non-bearing fruit, nut, and citrus trees.
- * Commercial sod farms.

Forest Trees [Forestry]:

- * Plantations, forests, seed orchards, felled trees, cut stumps.

B. Non-agricultural, Non-termite Control Uses

If the product is labeled for reformulation into products bearing labeling for non-agricultural uses (other than termite control), the label must contain the following statements:

"After December 1, 2000, this product may only be used to formulate an end-use pesticide product labeled for non-agricultural, non-termite control uses in accordance with the following conditions:

- (i) Any emulsifiable concentrate (EC) end-use product formulated from this product must be labeled as a restricted use product. All other end-use products formulated from the product (other than containerized baits in child-resistant packaging) must either be labeled as restricted use or packaged in containers no smaller than 15 gallons of a liquid formulation or 25 pounds of a dry formulation.

- (ii) The end-use product may not bear use directions for any indoor residential use (as that term is defined in 40 CFR 152.3) other than containerized baits in child-resistant packaging.
- (iii) Any emulsifiable concentrate (EC) end-use product formulated from this product may not bear use directions for any indoor non-residential use. All other end-use products may not bear use directions for any indoor non-residential use other than one or more of the following uses: warehouses, ship holds, railroad boxcars, industrial plants, manufacturing plants, food processing plants, or containerized baits in child-resistant packaging.
- (iv) The product may not bear use directions for any residential outdoor use other than one or more of the following public health uses: individual fire ant mound treatment or mosquito adulticide use.
- (v) The product may not bear use instructions for any non-residential outdoor use other than one or more of the following uses:
 - (a) golf courses, road medians, and industrial plant sites, provided that the maximum label application rate is no greater than 1 lb. ai/acre;
 - (b) mosquito adulticide use for public health purposes;
 - (c) individual fire ant mound treatment for public health purposes; and
 - (d) fence posts, utility poles, railroad ties, landscape timbers, logs, pallets, wooden containers, poles, posts and processed wood products."

Pest Control Indoors [Indoor Residential]:

- * Containerized baits in child resistant packaging for indoor residential uses.

Pest Control Indoors [Indoor Non-Residential]:

- * Crack, crevice, and spot treatment in food and non-food areas of warehouses, ship holds, railroad boxcars, industrial plants, manufacturing plants, food processing plants only.

Pest Control Outdoors [Terrestrial Non-Food, Domestic Outdoor]:

- * Public health uses to control fire ant mounds.
- * Public health uses as a mosquito adulticide. Mosquito control may only be applied by trained personnel of public health organizations, mosquito abatement districts, public mosquito control programs, and professional pest control operators.

Pest Control Outdoors [Terrestrial Non-Food]:

- * Underground utility cables and conduits in non-residential sites.
- * Sewer manhole lids and walls.
- * Turf and ornamentals in road medians; turf and ornamentals in industrial plant sites (provided the use rate is no greater than 1 lb. ai/acre).
- * Localized exterior surface treatment of warehouses, railroad boxcars, industrial plants, manufacturing plants, food processing plants only.
- * Soil applied perimeter treatment of warehouses, industrial plants, manufacturing plants, food processing plants only.

Non-Residential Outdoor Control of Wood Infesting Insects [Terrestrial Non-Food]:

- * Fence posts, utility poles, railroad ties, landscape timbers, logs, pallets, wooden containers, poles, posts, processed wood products.

Turf [Terrestrial Non-Food]:

- * Golf course turf, turf in road medians, and turf in industrial plant sites (provided the use rate is no greater than 1 lb. ai/acre).

C. Termite Control Uses

If the product is labeled for reformulation into products labeled for termite control, the label must contain the following statements:

"After December 1, 2000, this product may only be used to formulate an end-use pesticide product labeled for termite control in accordance with the following conditions:

- (i) This product may not be used after December 31, 2004, to formulate any product labeled for termite control, unless prior to that date, EPA has made a written determination that pre-construction termite control use may continue.
- (ii) Any end-use product formulated from this product must bear EPA-approved labeling that (a) does not include use instructions for any post-construction applications other than spot and local treatment; and (b) states this product may only be used for spot and local treatment until December 31, 2002.
- (iii) Any end-use product formulated from this product must bear EPA-approved labeling with a maximum chlorpyrifos end-use dilution of 0.5% active ingredient.
- (iv) Any emulsifiable concentrate (EC) end-use product formulated from this product (other than containerized baits in child-resistant packaging) must be labeled as a restricted use product. All other end-use products formulated from the product must either be labeled as restricted use or packaged in containers no smaller than 15 gallons of a liquid formulation or 25 pounds of a dry formulation."

Wood or Wood Structure Protection Treatments [Terrestrial Non-Food]:

- * Spot and localized termiticide treatments.

D. Other Uses

This product may be used to formulate products for specific use(s) not listed on the MP label if the formulator, user group, or grower has complied with U.S. EPA submission requirements regarding support of such use(s).

E. Experimental Uses

This product may be formulated into insecticide products for uses for experimental purposes that are in compliance with US EPA requirements.

F. Other Prohibited Uses

All manufacturing-use and end-use products produced from this product must bear the following statement:

"This product may NOT be used for formulation into manufacturing-use or end-use products for the following uses:

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Aquatic Uses (Aquatic Food Crop, Aquatic Non-Food):

* Any aquatic use, including mosquito larvicide."

WARRANTY LIMITATIONS AND DISCLAIMER

CHEMINOVA warrants that the material contained herein conforms to the chemical description on the label, that it will pass without objection in the trade under the contract description, and that such product will be delivered free from any lawful security interest, lien, or encumbrance. CHEMINOVA MAKES NO OTHER EXPRESS WARRANTIES OF ANY KIND AND DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY CHEMINOVA, ITS DISTRIBUTORS, AGENTS, OR EMPLOYEES SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY, AND THE BUYER MAY NOT RELY ON SUCH INFORMATION OR ADVICE.