



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

AUG 11 2008

Jane Rothwell  
Registration Specialist  
Makhteshim-Agan of North America  
4515 Falls of Neuse Road  
Raleigh, NC 27609

Subject: Revised Basic CSF (impurity listing) and a new Alternate CSF.  
Revised label per revised basic CSF composition and Agency's comments of  
January 30, 2008.  
Pyrinex Chlorpyrifos Technical  
EPA Reg. No. 11678-58  
Submission dated April 1, 2008

Dear Ms. Rothwell:

The Confidential Statements of Formula (CSF) for the basic and alternate formulation dated April 1, 2008 for EPA Reg. No. 10958-58 and the product chemistry data you submitted have been reviewed and are acceptable. The basic and alternate CSFs support the label claim of 97.9% chlorpyrifos. These two CSFs supersede all previous versions and have been placed in your product file.

The revised label of this product is acceptable. A stamped copy of the label "accepted" is enclosed for your records.

Please submit two copies of the final printed label for our files prior to releasing the product for shipment. If you have any questions please call me at (703) 308-8328.

Sincerely yours,

A handwritten signature in black ink that reads "Akiva Abramovitch".

Akiva Abramovitch, Ph. D.  
Insecticide/Rodenticide Branch  
Registration Division (7505P)

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# PYRINEX

## CHLORPYRIFOS INSECTICIDE

An Insecticide for Formulating Use Only

|   |                   |
|---|-------------------|
| <b>ACTIVE INGREDIENT:</b>   | <b>% BY WT.</b>   |
| Chlorpyrifos: (0,0-diethyl 0-(3,5,6-trichloro-2-pyridinyl phosphorothioate) ..... | 97.9%             |
| <b>INERT INGREDIENTS:</b> .....   | 2.1%              |
|   | <b>TOTAL 100%</b> |

EPA Reg. No. 11678-58

EPA Est. No. [REDACTED]

**Manufactured for:**

Makhteshim Chemical Works, Ltd.  
c/o Makhteshim Agan of North America, Inc.  
4515 Falls of Neuse Rd., Suite 300  
Raleigh, NC 27609

**ACCEPTED**  
AUG 11 2008

**NET CONTENTS: \_\_\_\_\_ POUNDS**

**KEEP OUT OF REACH OF CHILDREN**

**WARNING**

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 11678-58

**FIRST AID**

- 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 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 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 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.

**Have the product container or label with you when calling a poison control center or doctor or going for treatment.** You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information.

**NOTE TO PHYSICIAN:** Pyrinex (chlorpyrifos) is a cholinesterase inhibitor. Initial measures include removal of secretions, maintenance of a patient airway, and if necessary, artificial respiration. When cyanosis is relieved, atropine may be administered in large therapeutic doses, repeated as necessary to the point of tolerance. If symptoms warrant further treatment, protopam chloride (pralidoxime chloride, 2-PAM chloride) has shown utility as adjunctive therapy. Never use morphine. Continued absorption of the poison may occur resulting in a fatal relapse after initial improvement. Very close supervision of the patient is indicated for at least 48 to 72 hours.

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

**WARNING**

May be fatal if swallowed. May be fatal if inhaled. Harmful if absorbed through skin. Do not breathe dust. Avoid contact with skin, eyes, or clothing. Remove and wash contaminated clothing before reuse. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Handle chemical in a ventilated area.

**PRECAUTIONS**

Read all directions before using. Keep away from food, feedstuffs, and domestic water supplies. Keep container closed.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to birds and wildlife, and extremely toxic to fish, aquatic invertebrates, and bees. 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. 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 uses: text in [square brackets] after each site category heading refers to the general use group as referenced in 40 CFR 158.

This product may be used to formulate products for any additional 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).

**A. AGRICULTURAL USES**

- 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:
  - ❖ Cauliflower: 3 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; only one application of any chlorpyrifos-containing product can be made per year to the lower 4 feet of the trunk); asparagus; banana; beet (sugar, garden/table, including crops grown for seed); blueberry; **Brassica (cole) leafy vegetables** (bok choy, broccoli, broccoli raab, Brussels sprouts, cabbage, cauliflower, Chinese cabbage, collards, kale, kohlrabi); caneberrries; cherimoya; cherries (sour, sweet); **citrus fruits**, corn (field corn, sweet corn (including corn grown for seed)(maximum of 3 lb. ai/acre/season); cotton; cranberry; cucumber; date; feijoa; fig; grape; kiwifruit; leek; **legume vegetables (succulent or dried)**, mint; nectarine; onion (dry bulb); peach; peanut; pear; pepper; plum; prune; pumpkin; radish (including crops grown for seed); rutabaga; sapote; seed and pod vegetables; sorghum (milo); strawberry; sugarcane; sunflower; sweet potato; tobacco; **tree nuts**, turnip; wheat; seed treatment.

**Ornamentals - commercial production only [Commercial Terrestrial Non-Food, Commercial Greenhouse Non-Food]:**

- Flowers, shrubs, evergreens, vines, shade, and flowering trees in nurseries or greenhouses only.
- Christmas trees.
- Forest tree nurseries.
- Non-bearing fruit, nut, and citrus trees.
- Commercial sod farms.
- Grass grown for seed.

**Forest trees [Forestry]:** Plantations, forests, seed orchards, felled trees, cut stumps.

**Commercial Livestock Housing:** Cattle ear tags, poultry houses, turkey barns, swine barns, and dairy barns only.

**B. NON-AGRICULTURAL, NON-TERMITE CONTROL USES:**

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 control.
- 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 per acre;
  - (b) fence posts, utility poles, railroad ties, landscape timbers, logs, pallets, poles, posts

**Pest Control Indoors [Indoor Residential]:** Containerized ant and roach baits in child resistant packaging for indoor residential uses only.

**Commercial Pest Control Indoors [Indoor Non-Residential]:** Ship holds, railroad boxcars, industrial plants, manufacturing plants, food processing plants only.

**Commercial Pest Control Outdoors [Terrestrial Non-Food, Non-Residential Commercial]:**

- Underground utility cables and conduits.
- 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).
- Interior treatment of warehouses, railroad boxcars, industrial plants, manufacturing plants, food processing plants only.

**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).

**Public Health Uses Only:**

- USDA Quarantine Use: soil treatment of potted, containerized, or balled and burlapped nursery stock plants in nurseries and greenhouses only.
- Public health uses to control individual fire ant mounds and for mosquito control. 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.

**C. OTHER USES:** This product may be formulated into insecticide products for other uses for which the US EPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration excluding any use strictly prohibited by this label.

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

**E. 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: **Aquatic Uses (Aquatic Food Crop, Aquatic Non-Food):** Any aquatic use, including mosquito larvicide, termiticide uses."

**STORAGE AND DISPOSAL**

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

**STORAGE:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not store above 100°F 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), perforate rinsed containers, and offer for disposal in a landfill approved for pesticide containers. Do not reuse containers. Do not cut or weld container.

**IN CASE OF A SPILL, FIRE, OR OTHER EMERGENCY:** Isolate the spill. Hold this package, other cargo, and vehicles involved. Immediately call Infotrac at 1-800-535-5053.

**GENERAL:** Consult Federal, state, or local disposal authorities for approved alternative procedures.

**LIMITATION OF WARRANTY AND LIABILITY**

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES and LIMITATIONS OF LIABILITY.**

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Chemical Works, Ltd. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Makhteshim Chemical Works, Ltd. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Chemical Works, Ltd. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Chemical Works, Ltd. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Chemical Works, Ltd.'s election, the replacement of product.

Pyrinex Chlorpyrifos Insecticide (11678-58)(EPA app 1-30-08)(annotated)-to EPA 7-29-08