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5905-112

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

MAR 14 1996

Ms. Judy Oldham  
Manager, Registration Services  
Helena Chemical Co.  
6075 Poplar Avenue, Suite 500  
Memphis, TN 38119

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Dear Ms. Oldham:

Subject: Deletion of Unsupported Malathion Uses  
EPA Registration No. 5905-112  
Your Application and Labeling Dated May 29, 1993  
Federal Register Notice of January 12, 1994

The amendment referred to above, submitted in connection with registration under FIFRA, is acceptable, provided that you:

Submit one copy of your final printed labeling incorporating the following correction(s) before you release the product for shipment.

1. Update the second sentence under the "Environmental Hazards" statements to read as follows:

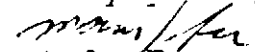
"For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. For aquatic uses, do not apply directly to water except as specified on this label".

2. This labeling does not bear the required Worker Protection statements as outlined in PR Notices 93-7 and 93-1. We note that you have submitted labels in accordance with the instructions in those Notices. The new protective language in those submissions as accepted in the Agency letter of March 3, 1994 must be incorporated into this label for any shipments released after the deadlines that have been established.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of this condition.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

  
Robert A. Forrest  
Product Manager (14)  
Insecticide-Rodenticide Branch  
Registration Division (7504C)



Recycled/Recyclable  
Printed with Soy/Canola Ink on paper that  
contains at least 50% recycled fiber

# CYTHION® ULV CONCENTRATE INSECTICIDE

**Active Ingredients:**  
 Malathion: O,O-diethyl phosphorodithioate of diethyl mercaptosuccinate.. 91.00%

**Inert Ingredients:** ..... 9.00%

**TOTAL** ..... 100.00%

One gallon contains 9.7 pounds of malathion  
Registered Trademark of Cheminova, Inc.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

**PRECAUCION AL USARIO:** Si usted no lee ingles, no use este producto hasta que le etiqueta haya sido explicado ampliamente.

See Inside Booklet for Additional Precautions and Directions For Use.

EPA REG. NO. 5905-112

NET CONTENTS:

EPA EST. NO.

REGISTERED  
WITH THE ENVIRONMENTAL  
PROTECTION AGENCY

MAR 14 1996

MANUFACTURED BY  
HELENA CHEMICAL COMPANY  
MEMPHIS, TN 38119

5905-112

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

**CAUTION**

May be harmful if swallowed. Do not take internally. Avoid contact with eyes, skin and clothing. Avoid breathing vapors, dust, or spray mist. Wash thoroughly after handling. Wash contaminated clothing before reuse. Flush contaminated eyes with plenty of water and get medical attention if irritation persists. Keep children and pets off treated areas until this material is washed into the soil and grass is dry.

**STATEMENT OF PRACTICAL TREATMENT**

**IF SWALLOWED:** Call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching the back of throat. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.

**IF INHALED:** Remove victim to fresh air. Apply artificial respiration if indicated.

**IF IN EYES:** Flush eyes for at least 15 minutes with water. Call physician immediately.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates and aquatic life stages of amphibians. Do not apply directly to water or wetlands (i.e., swamps, bogs, marshes, and potholes). Drift and runoff may be hazardous to aquatic organisms in areas near the application site. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**DIRECTIONS FOR USE**

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

**CHEMIGATION PROHIBITION**

Do not apply this product through any type of irrigation system.

**REENTRY STATEMENT**

**DOES NOT APPLY TO MOSQUITO CONTROL APPLICATION IN POPULATED AND RURAL AREAS.**

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information. CAUTION! Area treated with Malathion on (date of application). Do not enter without appropriate protective clothing until sprays have dried. See Statement of Practical Treatment and Precautionary Statements for actions to be taken in case of accidental exposure.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or 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 by other procedures approved by state and local authorities.

CYTHON ULV CONCENTRATE can be effectively applied with conventional aircraft spray equipment by making a few minor modifications in the plumbing and boom assembly.

### PUMP

Pumps capable of producing pressures of 40 to 50 psi will be satisfactory. A bleed line at least 3/16 inch in diameter should be installed on the high point of the impeller chamber to release trapped air. This line should bleed back to the top of the tank above the liquid level.

### BY-PASS

A by-pass is required from the spray pump outlet to the spray pump inlet. This line must be equal in diameter to the pump outlet and should contain a valve controllable from the cockpit that will permit adjustments of boom pressure in flight. The by-pass commonly used to recirculate CYTHON ULV CONCENTRATE to the spray tank must be closed to avoid aeration of the insecticide.

### BOOM AND NOZZLE PLACEMENT

The distance between the left and right outboard nozzles should be at least 3/4 of the wing span. The total number of nozzles used should be equally spaced across this span if the aircraft is flown at twenty feet or higher. Trailing edge booms are desirable and the nozzles should be placed on boom where pilot can readily see them to check any plugging of nozzles during spray operation. A bleed line at least 3/16 inch in diameter should be attached to the outer end of each boom and routed back to the top of the spray tank but above the liquid level. This line will bleed off pressures and assure sharp cut-off. If a nozzle is placed at each end of boom as many Ag Cat spray booms are assembled, this bleed line is not necessary.

### NOZZLES

Use at least 4 to 6 flat fan nozzles, such as Spraying Systems 8001, 80015 or 8002 for small aircraft such as Piper Pawnees and Stearmans. For aircraft operating at 150 mph or faster, use 10 to 14 8010 or 8015 flat fan nozzles. Nozzles should be pointed straight downward on small aircraft and straight back for faster aircraft. Use 100 mesh screens with 8001, 80015 and 8002 nozzles and large-volume 50-mesh screen should be used in spray systems. No screens are required for the 8010 or 8015 nozzles. Diaphragm check valves should be used on each nozzle to insure positive cut-off of spray during flight. Do not use cone nozzles. Rotary atomizers, commonly known as Mini-Spin nozzles, developed by the Plant Pest Control Division, USDA, can be substituted for the flat fan nozzles. Use the same flat fan nozzle tips as mentioned above when using the Mini-Spin nozzle.

### GENERAL INFORMATION

**CYTHION® ULV CONCENTRATE** is used undiluted for ultra-low volume aerial applications to control adult corn rootworm, beet leafhopper, blueberry-maggot, cereal leaf beetle, cotton boll weevil, flies, grasshoppers and mosquitoes as specified below. Aerial applications should be made at altitudes of 20 to 25 feet.

**NOTE: CYTHION® ULV CONCENTRATE** may cause spotting on automobile paint finish if prolonged exposure is permitted. Cars should not be sprayed directly. If accidental exposure does occur, the car should be washed immediately.

This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service.

#### **ALFALFA, CLOVER, COTTON, PASTURE, AND RANGE GRASS, GRASS AND GRASS HAY, AND NONAGRICULTURAL LANDS (waste lands, roadsides, soil bank lands):**

For control of grasshoppers, apply 8 fluid ounces of **CYTHION® ULV CONCENTRATE** per acre. Repeat applications as necessary.

On alfalfa, clover, pasture and range grass, grass and grass hay, may be applied on day of harvest or grazing. Do not apply to alfalfa and clover in bloom.

On corn, make no application within 5 days of harvest or forage use.

#### **BLUEBERRIES (grown in Michigan and Indiana):**

For control of blueberry maggot on blueberries, apply 10 fluid ounces of **CYTHION® ULV CONCENTRATE** per acre. Apply uniformly and repeat applications as necessary. No waiting period is necessary between last application and harvest.

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**GRASSES:**

For control of cereal leaf beetle on grasses, apply 8 fluid ounces of **CYTHION® ULV CONCENTRATE** when adult beetles become active in the Spring. Repeat application within 7 to 14 days for control of adults and young larvae. Make no application on cereal crops within 7 days of harvest or forage use. On grasses, may be applied on day of harvest or grazing.

**CORN:** For control of adult corn rootworm on corn, apply 4 fluid ounces of **CYTHION® ULV CONCENTRATE** per acre. Repeat application as necessary. Make no application on corn within 5 days of harvest or forage use.

**COTTON:** For control of adult corn rootworm on corn, apply 4 fluid ounces of **CYTHION ULV CONCENTRATE** per acre. Repeat applications as necessary.

For late season control of boll weevil use 16 fluid ounces per acre.

**ALFALFA, CLOVER, PASTURE AND RANGE GRASS, GRASS AND GRASS HAY, BEANS, RICE, AND NONAGRICULTURAL LANDS (wastelands, roadsides, soil bank lands):**

Adult mosquitoes and flies - Apply **CYTHION ULV CONCENTRATE** at the rate of 2 to 4 fluid ounces for control of adult mosquitoes and at 6 to 8 fluid ounces per acre for control of adult flies. Repeat applications as necessary. (Broadcast use only over intermittently flooded areas. Application may not be made around bodies of water where fish or shellfish are grown and/or harvested commercially.)

On alfalfa, clover, pasture and range grass, grass and grass hay, may be applied on day of harvest or grazing. Do not apply to alfalfa and clover in bloom.

On corn make no application within 5 days of harvest or forage use; on rice, within 7 days of harvest; on beans within 1 day of harvest.

**NONAGRICULTURAL LANDS:**

For control of beet leafhopper on wild host plants, use 8 fluid ounces of **CYTHION ULV CONCENTRATE** per acre.

(CONSULT STATE AGRICULTURAL AUTHORITIES FOR PROPER TIMING OF SPRAYS.)  
Before using **CYTHION ULV CONCENTRATE** for the preparation of malathion insecticides, manufacturers should consult Cheminova, Inc. for manufacturing and safe handling instructions.

CONDITIONS OF SALE - LIMITED WARRANTY  
AND LIMITATIONS OF LIABILITY AND REMEDIES

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions, the failure to follow the label directions, or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

- ) The exclusive remedy against the Company for any cause of action relating to the handling or use of this product is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. The Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income.

The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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