

2217-131 1012  
JAN 12 1993

James A. Armbruster, Ph.D.  
PBI/Gordon Corporation  
P.O. Box 4090  
1217 West 12th Street  
Kansas City, MO 64101

Dear Dr. Armbruster:

Subject: Revised labeling  
Methoxychlor Emulsion Concentrate  
EPA Registration No. 2217-131  
Amendment application of November 12, 1992

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

1. Make the labeling changes listed below before you release the product for shipment bearing the amendment labeling:

- a) Add a footnote to the label ingredient statement indicating contains: petroleum distillates
- b) Change the statement "Avoid contamination of food feed" to "Do not contaminate food or feed."
- c) Revise the environmental hazards wetlands statement to:

"Do not apply directly to water, to areas where surface water is present or to intertidal areas below the means high water mark."

2. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 Enclosure for a further description of final printed labeling.

If these conditions are 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 these conditions.

-2-

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

Sincerely yours,

DHE

Dennis H. Edwards, Jr.  
Product Manager (19)  
Insecticide-Rodenticide Branch  
Registration Division (H-7505C)

Enclosure

AFTER TEXT

# METHOXYCHLOR EMULSION CONCENTRATE

Contains 2 Pounds Methoxychlor Per Gallon

For Control of Certain Insect Pests of  
Livestock, Crops and Stored Grain

ACCEPTED  
with CDNR INTS  
in EPA Letter Dated

JAN 12 1993

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

2217-131

## ACTIVE INGREDIENTS:

Methoxychlor: 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)  
ethane . . . . . 24%

INERT INGREDIENTS: . . . . . 76%

TOTAL 100%

This product contains:

2.0 lbs. 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)ethane per gallon.

KEEP OUT OF REACH OF CHILDREN

## CAUTION

See Side Panels for Additional Precautionary Statements  
and Statement of Practical Treatment.

NET CONTENTS (1 QUART, 1 GALLON, or 2.5 GALLONS)

897/1192 APXXXXXX

EPA REG. NO. 2217-131  
EPA EST. NO. 2217-KS-1

Mfd by PBI/GORDON CORPORATION  
Kansas City, MISSOURI 64101

STOP! READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans & Domestic Animals

**CAUTION:** Harmful if swallowed. Avoid contact with skin. Avoid breathing spray mist. In case of skin contact, wash with soap and water. Avoid contamination of feed and foodstuffs.

### Statement of Practical Treatment

**IF SWALLOWED:** Call a physician immediately. Gastric lavage is indicated if material was taken internally. DO NOT INDUCE vomiting unless other treatment is not available. Vomiting may cause aspiration pneumonia. If it is necessary to induce vomiting, give person one or two glasses of water and insert finger in back of throat. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

**IF INHALED:** Remove victim to fresh air and apply respiration as indicated.

**IF ON SKIN:** Wash promptly with soap and water. Rinse thoroughly.

**IF IN EYES:** Flush with plenty of water and get medical attention immediately.

**Environmental Hazards:** This pesticide is toxic to fish and aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water or wetlands (swamps, bogs, marshes, and potholes). Do not contaminate water when disposing of equipment washwaters. Do not apply where run-off is likely to occur. Do not apply when weather conditions favor drift from areas treated. Apply this product only as specified on this label.

**Physical or Chemical Hazard:** Do not use 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.

## STORAGE & DISPOSAL

**STORAGE:** Store in original container in a locked storage area inaccessible to children or pets.

**PESTICIDE 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:** For Metal Containers - 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. For Plastic Containers - 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.

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

Do not enter or allow entry into treated areas until sprays have dried to perform hand labor tasks. A person may enter the area to perform other tasks only if the person is wearing the personal protective equipment listed on the label for a pesticide handler.

Do not apply this product in a way that will contact unprotected workers, either directly or through drift. Only protected handlers wearing long pants, long sleeved shirts, socks, shoes and chemical resistant gloves may be in the area during application.

## GENERAL INFORMATION

Methoxychlor Emulsion Concentrate is an emulsifiable liquid containing 2 pounds technical methoxychlor per gallon and is to be used as a spray with water for the control of certain insects. Do not use this product with any spray materials which are incompatible with oil. Do not apply within 14 days of application of sulfur or sulfur-containing products.

Users should observe the usual precautions concerning application of oil-containing products to plants during high temperatures, since many plants are then more susceptible to oil injury.

### **BEEF CATTLE, SHEEP, SWINE, NON-LACTATING DAIRY CATTLE, NON-LACTATING GOATS**

**FOR CONTROL OF HORNFLIES, LICE, TICKS, KEDS AND FLEAS:** Use a maximum rate of 1 quart in 12 1/2 gallons of water and apply as a drenching spray. Use 2 quarts of finished spray per head of large animals and proportionally less for smaller animals. Do not treat animals less than 30 days of age. Repeat applications at a minimum of 21 day intervals. Do not apply to lactating dairy cows or lactating goats.

**SELF APPLICATOR (Back rubber treatment) FLY CONTROL ON CATTLE - (Except Dairy Animals):** For control of Horn flies dilute 1 quart to 1 gallon METHOXYCHLOR EMULSION CONCENTRATE with 4 gallons of diesel fuel or furnace-type oil. Do not use any other type of oil. Use 1 gallon of solution to saturate 15 to 20 feet of burlap "backrubber". The burlap should be re-treated over 21 to 35 day intervals using 2 quarts of finished solution per 15 to 20 feet of cable. Regular exposure of animals for about 10 weeks is needed for optimum control.

### **BUILDINGS & STORAGE AREAS**

**Contact and Space Spray for Flies and Mosquitoes:** To reduce populations of house flies, stable flies and mosquitoes in farm buildings, in barnyards, in alleys, on dumps and other outdoor locations dilute 1 pint with 2 1/2 gallons of water and apply in space by mist blower or directly to flies by hydraulic sprayer, hand sprayer or cylindrical pressure sprayer. Care should be taken to avoid contamination of milk handling equipment, feedstuffs, feed troughs and watering receptacles. Cover securely all milk-handling equipment, feedstuffs, troughs, bins, or other food and water receptacles while spraying. Dairy animals should not be present while spraying.

**GRAIN STORAGE BINS, ELEVATOR TUNNELS (GALLERY FLOOR, HEADHOUSE), PEANUT WAREHOUSES, FREIGHT CARS, GRAIN TRUCKS, SHIPS' HOLDS:** Aids in control of cadelle, flat-headed grain beetle, saw-toothed grain beetle, lesser grain borer, red flour beetle, long-headed flour beetle, rice weevil, granary weevil, confused flour beetle, foreign grain beetle and hairy fungus beetles. Use 1 gallon in 10 gallons water and apply 2 gallons spray per 1,000 square feet. Treat when empty. Clean area thoroughly and remove old grain and debris before spraying. On elevator tunnels, gallery floors and head houses, make 3 applications. Do not add grain to bin for at least 24 hours or until walls have dried.

### **MOSQUITO BREEDING AREAS**

Apply around the perimeter of lakes, streams, ponds, swamps, marshes, estuaries and other areas of standing water (intermittently flooded areas, stagnant water, temporary rain pools, sloughs and ponds) where mosquito larvae are to be controlled.

Apply in undiluted or diluted form by ground sprayer or aircraft to known mosquito breeding sites.

Prehatch Larvacide	Water treatment. Apply as a winter prehatch treatment for control of "spring brood" mosquito larvae. Make a single application during winter and early spring at 1 to 2 quarts per acre. Apply only to known mosquito breeding sites.
Larvacide	Water treatment. Apply as needed during the spring and summer at 3/4 to 2 pints per acre. Apply only to known mosquito breeding sites.

Do not apply to water used for irrigation, recreational, and domestic purposes. Methoxychlor is toxic to fish. Shrimp and crabs will be killed at given application rates. Do not apply where these are important resources. Do not apply to water drainage areas where runoff or flooding will contaminate any body of water. Do not contaminate water by cleaning of equipment or disposal of wastes and containers.

## FORESTS AND SHADE TREES

For control of the following insects use a 6% (1 gallon per 3 gallon water) methoxychlor solution with a mist blower at rates recommended in the following table.

Mix 1 gallon Methoxychlor E.C. per 3 gallons of water for mist blower solution, or 1 to 2 quarts of Methoxychlor E.C. per 100 gallons of water for conventional sprayer.

INSECTS	PINTS 6% SOLUTION PER TREE TREE HEIGHT				GAL 6% SOLUTION PER ACRE
	35-50'	50-65'	65-80'	80-120'	
Canker worm	2	2	3	4	2
Eastern Tent Caterpillar	2	2	3	4	2
Elm Leaf Beetle	2	4	6	8	
Fall Webworm	0.5	1	2	2	1
Forest Tent Caterpillar	1	1.5	2	3	2
Gypsy Moth	0.5	1	2	2	2
Japanese Beetle	2	4	4	4	3
Lace Bug (Oaks & Sycamore)	1.5	2	3	4	2
May Beetle	1.5	2	3	4	2
Tussock Moth	2	2	3	4	2

**Control of Elm Bark Beetle (Vectors of Dutch Elm Disease):** Apply first application before elm flowers or leaves sprout using a 12% spray solution of Methoxychlor E.C. with a mist blower, or a 2% spray solution in a conventional sprayer. This application will usually be applied in March in the Southern States and in April in the Northern States. Use 2 to 3 gallons of spray solution, wetting all surfaces thoroughly.

Second application should be made 2 1/2 to 3 months after the first treatment. Reduce the active ingredient to 6% for mist blowers, and 1% for conventional sprayer. Cover all leaf and bark surfaces.

**Control of Elm Leafhopper (Vectors of Elm Phloem Necrosis):** Apply first application when elm leaves are fully grown. Use a 6% spray solution of Methoxychlor E.C. with a mist blower, or a 1% spray solution in a conventional sprayer. This application will be made in May in the Southern States and in June in the Northern States. Thoroughly cover all leaf surfaces. When second flush of growth appears usually 1 to 2 months after first treatment, repeat the above application covering all leaf surfaces thoroughly.

In those states where both the elm leafhopper and elm leaf beetle are known to be present a three-spray schedule will provide effective control. Apply protective spray before elm flowers or leaves sprout. Follow with second protective spray 2 1/2 to 3 months after the first. Then apply the third protective spray about 1 to 3 months after the second protective spray. Be sure to thoroughly cover all bark and leaf surfaces with each protective spray.

## AGRICULTURAL CROPS

Apply at recommended rates as a spray with ground or aerial equipment to thoroughly cover foliage and fruit. Mix in water, using the appropriate volume of water for equipment to be used (for example, 2 to 20 gallons per acre for aircraft or ground concentrate sprayers and greater amounts for high volume sprayers).

Begin application at first sign of infestation (for fruits, begin at petal fall) and repeat at 7 to 14 day intervals or as needed. Do not apply to crops within the number of days specified before harvest or grazing as shown by PHI (preharvest interval).

## FORAGE AND FIELD CROPS

**Alfalfa, Clover, Cowpea, Forage Grasses:** Foliar application. Apply when pests first appear. Repeat at 7 to 14 day intervals or as needed for treatment of stubble, second cuttings and subsequent cuttings. 7 day preharvest interval. Do not apply during bloom. - Leafhopper, Spittlebug: 1 to 2 quarts per acre. Alfalfa Caterpillar, Flea Beetles: 1 1/2 to 2 quarts per acre.

\*Alfalfa Weevil (larvae), Webworms, Fall Armyworm, Clover Leaf Weevil, Mexican Bean Beetle, Blister Beetles, Cucumber Beetles, Flea Weevil, Soybean Caterpillar, Velvet Bean Caterpillar: 2 to 3 quarts per acre.

Cowpea Curculio, Japanese Beetle: 3 quarts per acre. Armyworm: 3 to 4 quarts per acre. PHI: 7 days.

Do not graze or feed treated cowpea vines or cowpea hay to livestock.

\*For pea aphid and as an alternate program for control of alfalfa weevil add GORDON'S MALATHION 57% EMULSIFIABLE CONCENTRATE at the rate of 1 to 1 1/4 pounds active ingredient per acre.

### **Peanut, Soybean**

Velvet Bean Caterpillar, Mexican Bean Beetle, Japanese Beetle, Blister Beetles, Garden Webworm, Alfalfa Webworm, Cowpea Curculio, Leafhoppers, Fall Armyworm: 2 to 6 quarts per acre. PHI: 7 days.

Do not graze or feed treated soybean hay or straw to livestock.

## FRUITS

**Apple, Pear, Quince** - Apple Maggot, Codling Moth, Japanese Beetle, Plum Curculio, Tent Caterpillar: 7 1/2 to 15 quarts per acre, or 2 to 3 quarts per 100 gallons water at 350 to 500 gallons per acre. For plum curculio, make 2 to 4 applications at 7 to 10 day intervals beginning at petal fall. PHI: 7 days.

**Apricot, Cherry, Nectarine, Peach, Plum (Fresh Prunes)** - Cherry Fruitworm, Cherry Fruitflies, Japanese Beetle, Plum Curculio, Rose Chafer, Tent Caterpillar, Cankerworms: 7 1/2 to 15 quarts per acre, or 2 to 3 quarts per 100 gallons water at 350 to 500 gallons per acre. For cherry fruit fly, apply as a thorough cover spray as soon as adult flies appear. Repeat at 7 to 10 day intervals as long as adult flies are present. Consult your State Agricultural Extension Service for exact timing of sprays. For plum curculio, make 2 to 4 applications at 7 to 14 day intervals beginning at shuck split. PHI: 7 days for cherries, plums (fresh prunes); 21 days for apricots, nectarines, peaches.

**Blueberry, Cranberry, Currant, Gooseberry** - Japanese Beetle, Cranberry Fruitworm, Leafhoppers, San Jose Scale (crawlers): 2 to 6 quarts per acre, or 2 to 3 quarts per 100 gallons water at 100 to 200 gallons per acre. PHI: 14 days.

**Blackberry, Loganberry, Raspberry, Boysenberry, Dewberry, Youngberry, Strawberry** - Rose Chafer, Strawberry Weevil, Flea Beetles, Omnivorous Leaf Tier, Spittlebugs, Japanese Beetle: 2 to 3 quarts per acre, or 2 to 3 quarts per 100 gallons water at 100 to 200 gallons per acre. PHI: 14 days.

**Grape** - Berry Moth, Grape Leafhopper, Japanese Beetle, Leaf Skeletonizer, Rose Chafer: 2 to 6 quarts per acre or 2 to 3 quarts per 100 gallons of water at 100 to 200 gallons per acre. For grape berry moth, apply at petal fall, 7 to 14 days later, when second brood eggs are found (35 to 45 days after bloom), and 14 days later, or apply as a postbloom cover spray and repeat 10 days later. Make third and fourth applications at 10 day intervals if needed. For Japanese beetle and rose chafer, apply when beetles first appear and repeat at 7 to 10 day intervals as needed. PHI: 14 days.

## VEGETABLES

**Asparagus** - Asparagus Beetles: 2 to 4 1/2 quarts per acre. PHI: 7 days. If applied within 3 days of harvest, remove residues by washing or blanching.

**Beans** - Corn Earworm, Cucumber Beetles, Fall Armyworm, Webworm, Flea Beetles, Mexican Bean Beetle, Potato Leafhopper, Bean Leaf Beetle, Japanese Beetle: 2 to 6 quarts per acre. PHI: 3 days. Do not use vines as food or feed.

**Brussels Sprouts, Beets, Broccoli, Cabbage, Carrot, Cauliflower, Collard, Eggplant, Kale, Kohlrabi, Lettuce, Pepper, Radish, Rutabaga, Spinach, Turnip** - Blister Beetles, Flea Beetles, Leafhoppers, Alfalfa Looper, Fall Armyworm, Japanese Beetle, Imported Cabbageworm: 2 to 4 1/2 quarts per acre. PHI 14 days: broccoli, brussels sprouts, carrots, collards, kale, lettuce, peppers, and spinach. PHI 7 days: cabbage, cauliflower, eggplant, radish, rutabaga, turnips, and kohlrabi.

**Corn (Field and Sweet)** - Fall Armyworm, Armyworm, Japanese Beetles, Flea Beetles: 2 to 4-1/2 quarts per acre. PHI: 7 days. Do not feed treated corn to livestock.

**Peas** - Alfalfa Looper, Pea Weevil (early bloom before eggs are laid and again 5 days later), Bean Leaf Beetle: 2 to 6 quarts per acre. PHI: 7 days. Do not graze or feed treated pea vines or pea hay to livestock.

**Potato (Irish)** - Colorado Potato Beetle, Flea Beetles, Fall Armyworm, Leafhoppers, Blister Beetles: 2 to 4-1/2 quarts per acre. PHI: None.

**Sweet Potato, Yam** - Fall Armyworm, Flea Beetles: 2 to 4 1/2 quarts per acre. PHI: None.

**Tomato** - Colorado Potato Beetle, Flea Beetles, Fall Armyworm, Leafhoppers, Blister Beetles: 2 to 6 quarts per acre. PHI: 1 day for rates of less than 3 1/2 quarts per acre and 7 days for rates greater than 3 1/2 quarts per acre.

### LIMITED WARRANTY AND DISCLAIMER.

The manufacturer warrants only that the chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

The terms of this Limited Warranty and Disclaimer cannot be varied by any written or verbal statements or agreements. No employee or agent of the seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.