

US EPA ARCHIVE DOCUMENT

## Methoxychlor

## A. Data Used

1. Mallard duck  $LC_{50} > 5000$  ppm  
bobwhite quail  $LC_{50} > 5000$  ppm

These values were taken from: Heath, R. G. and others, 1970. Comparative dietary toxicities of pesticides to birds in short term tests. Patuxent Wildlife Research Center.

2. Rainbow trout  $LC_{50} = 0.062$  ppm - taken from Katz, M., 1960. Acute toxicity of some organic insecticides to three species of Salmonids and to the three-spine stickleback. Trans. Am. Fish Soc. 90:264-268.
3. Bluegill sunfish  $LC_{50} = 0.075$  ppm - taken from Tazwell, C. M., 1959. The toxicity of some organic insecticides to fishes. Proc. 12th Ann. Conf. Southwest Assoc. Game Fish Commrs., p 233-239.
4. Sand shrimp  $LC_{50} = 0.009$  ppm  
hermit crab  $LC_{50} = 0.009$  ppm

These values were taken from: Eisler, R., 1969. Acute toxicities of insecticides to marine decapod crustaceans. Crustaceana 16:302-310.

5. Eastern oyster  $LC_{50} = 0.09$  ppm - taken from Cope, Oliver, 1965. USDI Quarterly Report. Columbia Missouri Lab.

## B. Environmental Hazard Statements

1. For manufacturing use only label:

This pesticide is toxic to fish. Do not contaminate water by cleaning of equipment or disposal of wastes.

2. For all uses other than cranberry, mosquito larvacide and forest:

This pesticide is toxic to fish. Use with care when applying in areas adjacent to any body of water. Keep out of lakes, streams or ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

3. No Environmental Hazard statements will appear in this section for the cranberry, mosquito larvacide or forest uses of methoxychlor because they fall into the rebuttable presumption category.

C. Bee Caution - See Jim Stewart

D. Classification

1. According to Sec. 162.11(c)(2)(iii)(A) and (B) all methoxychlor uses except cranberries, mosquito larvacide and forests should be classified GENERAL.
2. The cranberry, mosquito larvacide and forest uses of methoxychlor fall into the rebuttable presumption category due to the acute toxicity to aquatic organisms as described in Sec. 162.11(a)(3)(i)(B)(3).

E. Recommendations

1. Cranberries - The presumption against cranberries can be rebutted against in several ways. The following lists a few methods:
  - a) The rates could be drastically lowered (This would, in all probability, eliminate the efficaciousness, however.)
  - b) Data could be provided to demonstrate that water released from treated cranberry bogs contains negligible (in terms of toxicity to aquatic organisms) or no detectable residues of methoxychlor.
  - c) Data could be provided to demonstrate that the treatment of cranberries and subsequent release of water has no effect on non-target aquatic organisms ( a monitoring or field study).

If the presumption is successfully rebutted against, the following Environmental Hazard statement will probably be appropriate for all labels containing cranberries:

This pesticide is toxic to fish. Use with care when applying in areas adjacent to any body of water. Fish, shrimp, crab and other aquatic life may be killed by this product. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply when weather conditions favor drift from target areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

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2. Mosquito larvacides - The presumption against the mosquito larvacide use of methoxychlor can be rebutted against in several ways. The most obvious ways are to modify use directions to minimize hazard and to submit field data indicating that the amount and type of effect is minimal for non-target aquatic organisms.

If the presumption is successfully rebutted, the following Environmental Hazard statement will probably be appropriate for all labels containing the mosquito larvacide use:

This pesticide is toxic to fish. Fish, shrimp, crab and other aquatic life may be killed at application rates specified on this label. Do not apply when weather conditions favor drift from target area. Do not contaminate water by cleaning of equipment or disposal of wastes.

If the presumption is successfully rebutted, the following statements will probably be required to appear in the directions for use as a mosquito larvacide:

*Restricted  
to non-fish  
bearing waters*

Consult your state Fish and Game Agency before applying this product to public waters. When using in lakes, ponds, tidal marshes and estuaries, apply only in shallow water at the edge of these areas.

3. Forest - The presumption against the forest use of methoxychlor can best be rebutted by submitting field data indicating that the problems associated with the use pattern are minimal. If the presumption is successfully rebutted, the following Environmental Hazard statement will probably be appropriate:

*Keep out* This ~~product~~ is toxic to fish. Use with care when applying in areas adjacent to any body of water. ~~Avoid application to lakes, streams and ponds.~~ Do not apply when weather conditions favor drift from target area. Do not contaminate water by cleaning of equipment or disposal of wastes.

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3. Cont'd

If the presumption is successfully rebutted, the following statement will probably be required to appear in the directions for the forest use: Consult your state Fish and Game Agency before applying this product.

Jack P. Edmundson, Jr.  
December 7, 1975

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