

November 29, 1999

301	5-569618
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Aquabiotics Corporation
P.O. Box 10576
Bainbridge Island, WA 98110

301	5-571226
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Attention: Mr. Nicholas A. Romeo

Subject: Fintrol Concentrate
EPA Reg. No. 39096-2
Your letters of August 23 and October 14, 1999

The labeling submitted with the above letter is acceptable, provided that you submit one (1) copy of final printed labeling with the following changes before you release the product for shipment:

1. On the "Outer Can Label", separate the reason for restricted use from the restricted use statement as follows:

RESTRICTED USE PESTICIDE

Due to Aquatic Toxicity & Need for Highly Specialized Applicator Training.

For retail sale to, and use only by, Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicators' Certification.

We note that you deleted the following sentence from your "Restricted Use Pesticide" block: "For use exclusively by Federal or state fish and game agency personnel trained in fisheries management or persons under their supervision." Since your product label now has the standard sentence, the second sentence is no longer required.

This registration will be subject to cancellation in accordance with FIFRA sec. 6(e) if you do not comply with these conditions. Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely,



Daniel B. Peacock, Biologist
Insecticide-Rodenticide Branch
Registration Division (7504C)

Enclosure: 1. Stamped Label

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TAKE TIME



OBSERVE LABEL DIRECTIONS

FINTROL-® CONCENTRATE

(antimycin A) (solution 20%)

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

DANGER: Fatal if swallowed. May be fatal if absorbed through skin. Causes substantial but temporary eye injury. Causes skin irritation. Do not breathe spray mist. Do not get in eyes, on skin or on clothing. Wear protective goggles. Wear chemical gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

Environmental Hazards
This product is very highly toxic to fish.

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal. SEE OUTER CAN LABEL FOR PROPER STORAGE, PESTICIDE DISPOSAL AND CONTAINER DISPOSAL.

EPA Reg. No. 39096-2
EPA Est. No. 39096-WA-01

Fintrol Concentrate for use with Fintrol (Antimycin) Fish Toxicant Kit

Ingredients	(w/w%)
Active Ingredients	
Antimycin A	20%
Inert Ingredients	
Soy lipids	15.4
Acetone	62.4
	100%

Physical or Chemical Hazards:
Extremely Flammable: Keep away from fire, sparks and heated surfaces.

FIRST AID IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

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

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

DIRECTIONS FOR USE
It is a violation of federal law to use this product in a manner inconsistent with its labeling. See "USE DIRECTIONS LEAFLET" for FINTROL (Antimycin A) Fish Toxicant Kit.

DANGER



POISON

KEEP OUT OF REACH OF CHILDREN

Aquabiotics Corp.
PO Box 10576
Bainbridge Island, WA

ACCEPTED
with **COMMENTS**
in EPA Letter Dated:

NOV 29 1999

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 39096-2

TAKE TIME



OBSERVE LABEL DIRECTIONS

FINTROL DILUENT

FOR USE WITH

FINTROL-® (Antimycin) Fish Toxicant Kit

Ingredients	(w/w%)
Inert Ingredients	
Diethyl Phthalate (surfactant)	30.5%
Nonoxyl-9 (detergent)	16.7%
Acetone	52.8%
	100%

DIRECTIONS FOR USE
It is a violation of federal law to use this product in a manner inconsistent with its labeling. See "USE DIRECTIONS LEAFLET" for FINTROL (Antimycin A) Fish Toxicant Kit.

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal. SEE OUTER CAN LABEL FOR PROPER STORAGE, PESTICIDE DISPOSAL AND CONTAINER DISPOSAL.

PRECAUTIONARY STATEMENTS Hazards to Humans & Domestic Animals

CAUTION: Harmful if swallowed. Harmful if inhaled. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin and clothing. Do not breathe spray mist. Do not get in eyes, on skin or on clothing. Wear protective goggles. Wear chemical gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

Physical or Chemical Hazards:
Extremely Flammable: Keep away from fire, sparks and heated surfaces.

First Aid: See Outer Can Label
EPA Reg. No. 39096-2
EPA Est. No. 39096-WA-01

CAUTION

Keep out of reach of children

AQUABIOTICS CORP.
P.O. Box 10576
Bainbridge Island, WA 98110

RESTRICTED USE PESTICIDE

For use only by persons who have been trained and certified for Highly Specialized Applicator training. For retail sale only to Certified Applicators, or persons under their direct supervision. For uses covered by the Certified Applicators' Certification.

FINTROL®

**CONCENTRATE (ANTIMYCIN A)
FISH TOXICANT KIT**

(Concentrate and Fintrol Diluent)

1 bottle of FINTROL-Concentrate and 1 bottle of

1 fl. Oz.)	FINTROL DILUENT (8 fl. Oz.)		
	Inert Ingredients		
v/w	Diethyl Phthalate		
	(surfactant)	30.5%	w/w
	Nonoxyl-9 (detergent)	16.7%	
	Acetone	52.8%	
v/w		100.0%	w/w

BOX 10576. Bainbridge Island, WA 98110
96-2 E.P.A. Est. No 39096-WA-01



POISON

Keep out of reach of children

and other Precautionary Statements.

DIRECTIONS FOR USE

Use this product in a manner inconsistent with its labeling.
See "FLEET" for "Fintrol (Antimycin A) Fish Toxicant Kit"

FINTROL DILUENT PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Harmful if inhaled. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin and clothing. Do not breathe spray mist. Do not get in eyes, on skin or on clothing. Wear protective goggles. Wear chemical gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

Physical or Chemical Hazards

EXTREMELY FLAMMABLE: KEEP AWAY FROM FIRE, SPARKS AND HEATED SURFACES.

FIRST AID

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

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

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

STORAGE AND DISPOSAL

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

Storage: Store only in original containers, in a dry place inaccessible to children and pets. Fintrol Concentrate will thicken if stored at temperatures below 65 F. Before use store overnight above 70 F. Fintrol Concentrate is stable for a minimum of 3 years when stored in unopened original glass bottles.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved state and local procedures.

ACCEPTED
with COMMENTS
to EPA Letter Dated:
NOV 29 1999
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
I am hereby approving for the pesticide
labeled under EPA Reg. No. 39096-2

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SPECIAL INSTRUCTIONS

Prior to the use of a fish toxicant in either public or private waters, the Director of the State Fish and Game Department or Conservation Department must be contacted to determine whether a permit is required. Such products must be used by or under the technical supervision of personnel of state and federal fish and game agencies, trained in fisheries management, who will provide any special instructions applicable to the particular geographical area.

ACCEPTED
with COMMENTS
in EPA Letter Dated:

NOV 29 1999

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
39096-2

FINTROL[®] Fish Toxicant Kit Use Direction Leaflet

Directions For Use

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

FINTROL-CONCENTRATE is designed for use in running water, streams and shallow waters. This liquid form of FINTROL may be applied to lakes and ponds by boat bailer method or spray equipment. Spray methods are useful at depths to 1 foot. Boat bailer and drip tubes, applied at the propeller wash, are used at other depths. Application from an airplane is NOT recommended.

Each can of Fintrol-Concentrate (Antimycin A) Fish Toxicant Kit [containing 240 cc. Fintrol-Concentrate (solution 20%) and 240 cc. Diluent] will, after mixing, make 480 cc., which treats approximately 38 acre-feet of water at 1 p.p.b. (1 part per billion).

AQUABIOTICS CORP.
P.O. Box 10576
10750 Arrow Point Dr. NE
Bainbridge Island, WA 98110

EPA Reg. No. 39096-2
EPA Est. No. 39096-WA-01

Licensed by: Wisconsin Alumni Research
Foundation

Trademark licensed by: Ayerst Laboratories, Inc.

Before applying FINTROL to either public or private waters, contact the Director of the State Fish and Game Department or Conservation Department for State and Federal regulations governing the use of fish toxicants in your area.

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TABLE 1—FOR ROUGH ESTIMATION OF CONCENTRATIONS* OF FINTROL (ANTIMYCIN A) NEEDED FOR COMPLETE† ERADICATION OF DIFFERENT FISH SPECIES, UNDER VARIOUS COMBINATION OF WATER TEMPERATURE AND WATER pH

TARGET SPECIES	SENSITIVITY OF TARGET SPECIES TO FINTROL (in p.p.b. of active ingredient)	EFFECTIVE CONCENTRATION OF FINTROL* (in p.p.b. of active ingredient)			
		When pH is 8.5 or less		When pH is 8.5 or more	
		water temperature above 60°F.	water temperature below 60°F.	water temperature above 60°F.	water temperature below 60°F.
gizzard shad					
trout					
pike					
carp					
minnows	5-10	5	7.5	7.5	10
suckers					
brook stickleback					
white bass					
sunfishes					
perches					
freshwater drum					
sculpins					
short nose gar					
bowfin	15-25	15	20	20	25
goldfish					
catfish					

*The concentration level suggested by this table should be confirmed by an on-site bioassay.
† This table is applicable only when a complete kill is desired. Do not use it for a selective kill. (See the following section.)

* Fish nomenclature according to American Fisheries Society
Note (columns 1 and 2) that the sensitivity of the target species determines the concentration range. To eradicate sensitive species, it is recommended that the appropriate formulation of FINTROL be applied so that the body of water will have a concentration of from 5 to 10 p.p.b. of antimycin A, depending upon variation in pH and water temperature. For more tolerant species, higher concentrations are recommended. Laboratory studies indicate that less sensitive fish will succumb at concentrations of from 15 to 25 p.p.b. of antimycin A, depending upon variations in pH and water temperature. Columns 3 to 6 show how to adjust for pH and water temperature. Note that, in general, the lower the pH, the less FINTROL required. The higher the water temperature, the less FINTROL required. The ideal situation for a complete kill would combine a highly sensitive species, low pH and high water temperature.

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For selective kills in ponds managed for sports fishing

The only way to determine the concentration of FINTROL needed for a selective kill is to perform a bioassay. This involves subjecting both the target and nontarget fish to several concentrations of FINTROL to determine the minimum lethal dose. (A description of the bioassay procedure is available upon request.)

HOW TO CALCULATE THE AMOUNT OF FINTROL TO BE ADDED TO A BODY OF WATER TO OBTAIN A GIVEN CONCENTRATION

To calculate the amount of FINTROL to be added to a body of water for eradication of undesired species, the following steps should be taken:

- Determine the volume of water to be treated in acre-feet. This can be arrived at by multiplying the surface area in acres by the average depth in feet.
- Determine the concentration to be used from Table 1.
- Multiply the number of acre-feet by the value given in Table 2, opposite the desired concentration.
- Divide this number by the total kit volume (480 cc. or 16 oz.) to get number of Fish Toxicant Kits needed.

TABLE 2—RAPID ESTIMATION OF FINTROL-CONCENTRATE REQUIREMENTS

Desired Concentration (p.p.b. active ingredient)	Amount of FINTROL-CONCENTRATE per acre-foot	
	cc*	oz. (approx.)
1 p.p.b.	12.3	½
2 p.p.b.	24.6	¾
3 p.p.b.	36.9	1¼
4 p.p.b.	49.2	1½
5 p.p.b.	61.5	2
6 p.p.b.	73.8	2½
7 p.p.b.	86.1	2¾
8 p.p.b.	98.4	3¼
9 p.p.b.	110.7	3¾
10 p.p.b.	123.0	4

*Obtained by multiplying 12.3 cc. by the p.p.b.
Note: 1 measuring teaspoon = 5 cc.; 1 measuring tablespoon = 15 cc.; ¼ standard measuring cup = 60 cc.; ½ standard measuring cup = 120 cc.; 1 standard meas. cup = 240 cc.

Sample calculation:

To treat 75 acre-feet at 3 p.p.b., use:
75 x 36.9 cc = 2,767 cc. of FINTROL-CONCENTRATE / 480 cc. = 5.8 kits, or
75 x 1¼ fl. oz. = 93¾ fl. oz. of FINTROL-CONCENTRATE / 16 oz. = 5.8 kits.

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