54/0692 300 54/0692 17 Ju PROTS - 1/30/92 ORIGINAL SIGNED 2/3/92

Dr. Stephen G. Newman Argent Chemical Laboratories 8702 152nd Avenue N.E. Redmond, Washington 98052-3506

Dear Dr. Newman:

Subject: Rotenone 5% Emulsifiable Concentrate

EPA Reg. No. 47677-3

Your Letter Dated January 13, 1992

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable provided that you:

- 1. Make the labeling change listed below before you release the product for shipment bearing the revised labeling:
 - a. Put an asterisk (*) after "INERT INGREDIENTS" and before the statement "This product contains aromatic solvents".
 - b. Under the section APPLICATION DIRECTIONS, Total Amount of Product Needed For Treatment, change the word "third" to "second" so the label reads "... divić, the corresponding numbers in the second column,...".
 - c. Put a footnote under the table that reads:

"Adapted from Kinney, Edward. 1965. Rotenone in Fish Pond Management. USDI. Washington, D.C. Leaflet FL-576."

2. Submit a copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section acceptance of these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes

	acceptar	ice of t	hese co	ndities.	URRENCES			
STMBOL								
SURMAME								***************************************
DATE								***************************************
EPA Form 1320-1 (12-78) DISK / 1/20/92-455/10166 OFFICIAL FILE COI							FICIAL FILE COPY	

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

Sincerely yours,

Robert A. Forrest Product Manager (14) Insecticide-Rodenticide Branch Registration Division (H7504C)

enclosure

ACCUPTED

THE COMMITTEE

TO STA Letter Description

Dader the Federal Insecticide, Fungicide, and Rodenticide Act as assembled, for the posticide sugistioned under EPA Rog. No. 47677-3

Rotenone Draft Labeling for 5% Liquid Emulsifiable

Left Panel

PRECAUTIONARY STATEMENTS

Hazards to Human and Domestic Animals

Warning: May be fatal if swallowed. May cause eye injury. Causes skin irritation. Do not get in eyes, on skin, or on clothing. Wear protective goggles, faceshield, or safety glasses when handling product. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash thoroughly before reuse.

Statement of Practical Treatment

IF SWALLOWED: Call a physician or Poison Control Center. DO NOT induce vomiting. This product

contains aromatic petroleum solvent. Aspiration may be a hazard. Promptly drink a large quantity of milk, egg white, and gelatin solution, or if these are not

available, water. Avoid alcohol.

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

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

Environmental Hazards

This pesticide is extremely toxic to fish. Fish kills are expected at recommended rates. Consult your State Fish and Game Agency before applying this product to public waters to determine if a permit is needed for such an application. Do not contaminate untreated water when disposing of equipment washvaters. Rotenone is toxic to most fish and their eggs at 0.5 to 1.0 ppm.

Physical and Chemical Hazards

Flammable. Keep away from heat and open flame.

Storage and Disposal

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

Storage: Store only in original container, in a dry place inaccessible to children and pets. If container is damaged: Stop leaks by repositioning the container or by patching or otherwise repairing leaks. Take care to avoid contact with the pesticide and wear protective gear. On cleanup of spilled liquids, wear protective equipment as required to prevent contact with the product or its vapors. Cover the spilled areas with generous amounts of absorbent material, such as clay, diatomaceous earth, sand or sawdust. Sweep the contaminated absorbent on to a shovel and put the sweepings into a salvage drum.

Dispose of wastes as below. Place any leaking container into a similar drum or glass container. Mark the container with the name of the product, ingredient statement, precautionary statement, and signal word. Contact us for replacement label.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes can not be disposed of by use according to the label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA regional office for guidance. 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 the State and local authorities.

Center (front) Panel

RESTRICTED USE PESTICIDE Due to Aquatic Toxicity

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 Applicator's certification.

ROTENONE 5%

For Control of Fish in Lakes and Ponds

ACTIVE INGREDIENTS:

Rotenone	5.0%
Other associated resins	10.0%
INERT INGREDIENTS:	85.0%
TOTAL	100.0%

This product contains aromatic solvents.

KEEP OUT OF REACH OF CHILDREN

WARNING

See Left Panel for additional precautionary statements.

Argent Chemical Laboratories Fisheries Chemical Division 8702 152nd Ave NE Redmond, WA 98052

EPA Reg. No.47677-3

EPA Est. No.47677-WA-1

Net Contents:	gallone
Lot No.:	

Right Panel

DIRECTIONS FOR USE

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

USE RESTRICTIONS:

Use against fish in lakes and ponds.

Since factors such as pH, temperature, depth and turbidity will change effectiveness, use this product only at locations, rates, and times authorized and approved by appropriate State and Federal Fish and Wildlife agencies. Rates must be within the range specified in the labeling.

Properly dispose of dead fish and unused product. Do not use dead fish as food or feed.

Do not use water treated with Rotenone to irrigate crops or release within 1/2 mile upstream of a potable water or irrigation water intake in a standing body of water such as a lake, pond, or reservoir.

APPLICATION DIRECTIONS:

Treatment of Lakes and Ponds

1. Application Rates and Concentrations of Rotenone

The actual application rates and concentrations of Rotenone needed to control fish varies widely. It will depend on the type of use (e.g., selective treatment, normal pond treatment, etc.) and the factors listed above. The table below is a general guide for the proper rates and concentrations.

2. Total Amount of Product Needed For Treatment

To determine the total number of gallons of ROTENONE 5% needed for treatment. Iffid your "Type of Use" in the first column of the Table below and then divide the corresponding numbers in the third column, "Number of Acre-Feet Covered by One-Gelkon", into the number of acre-feet in the body of water.

	Number of Acre Feet Covered by One Gallon	Parts per Million Rotenone (5%)
Type of Use		••••
Selective Treatment	30 to 24	0.10 to 0.13
Normal pond use	6.0 to 3.0	0.5 to 1.0
Remove Bullheads or Carp Remove Bullheads or Carp in	3.0 to 1.5	1.0 to 2.0
Rich Organic Ponds Pre-impoundment treatment	1.5 to 0.75	2.0 to 4.0
above dam	1.0 to 0.60	3.0 to 5.0

010

Computation of acre-feet for lake or pond:

An acre-foot is a unit of water volume having an area of one acre and a depth of one foot. To determine the acre feet in a given body of water, make a series of transects across the body of water taking depths with a pole or weighted line. Add the soundings and divide the number made to determine the average depth. Multiply this average depth by the total surface area in acres to determine the numbers of acre feet to be treated. If the number of surface acres is unknown, contact your local Soil Conservation Service. They can determine the surface area from aerial photographs or a plat drawn to scale.

3. Method of Application and Exposure Time

Pre mix with water at a rate of one gallon ROTENONE 5% to 10 gallons of water. Uniformly apply over water surface or bubble through underwater lines.

4. Removal of Taste and Odor

ROTENONE 5% treated waters do not retain a detectable odor or taste for more than a few days to a maximum of one month. Taste and odor can be removed immediately by treating with activated charcoal at a rate of 30ppm for each 1 ppm ROTENONE 5% remaining. (Note: As ROTENONE 5% detoxifies, less charcoal is required).

5. Restocking

ROTENONE 5% treated waters detoxify naturally in 1 week to 1 month, depending upon temperatures, alkalinity, etc. Rapid detoxification can be accomplished by adding chlorine or potassium permanganate to the water at the same rate as ROTENONE 5% in parts per million plus enough additional to meet the chlorine demand of the untreated water. To determine if detoxification has occurred, place live boxes containing samples of fish to be stocked in the treated waters. More rapid detoxification can be accomplished as above.

RE-ENTRY STATEMENT

Do not allow swimming in rotenone-treated water until application has been completed and all pesticide has been thoroughly mixed into the water according to label directions.

