

4581-174

04/27/2000

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APR 27 2000

Mr. Christopher Davis
Elf Atochem North America, Inc.
2000 Market Street, 21st Floor
Philadelphia, PA 19103

Dear Mr. Davis:

SUBJECT: Label Amendments Clarifying Use Directions; Adding Tables with Weeds, Rates and Gallons/Acre Foot; Adding Weed and Algal Species; and Revising Irrigation Restriction
Hydrothol 191 Aquatic Algicide and Herbicide
EPA Registration Number: 4581-174
Your Submissions Dated February 9, 2000 and February 15, 2000 as Amended by Email on April 20, 2000

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable, provided you make the following changes:

1. In the directions for use in controlling "Submerged Aquatics" in lakes and ponds (last paragraph on page 2), add rates in ppm after the rates given in gallons per acre foot, so that the revised first sentence reads as follows:

"Apply Hydrothol 191 at 0.7 gallons to 4.0 gallons per acre foot (0.5 to 3.0 ppm) for control of aquatic weeds."

2. Change the heading of the last column in the "Rate of Application" table on page 3 to read "Amount per Acre Ft." The current heading ("Gallons per Acre Ft") is not appropriate, since the rates for algae control are given in pints, rather than gallons.

3. Change "feed" to "non-feed" in the statement regarding the use of treated water for irrigation that appears at the end of the Environmental Hazards section. As written, the statement is ambiguous and could be construed to allow the immediate use of treated water for irrigation of feed crops. The revised sentence should read:

"Treated water can be used to irrigate non-food or non-feed crops, established ornamentals, and non-crop areas immediately."

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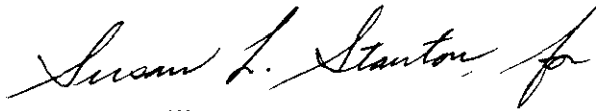
| CONCURRENCES | | | | | | | |
|--------------|--------------|--|--|--|--|--|--|
| SYMBOL ▶ | 7505C | | | | | | |
| SURNAME ▶ | S. Stanton | | | | | | |
| DATE ▶ | Apr 27, 2000 | | | | | | |

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4. Wherever missing, insert a zero (0) before the decimal point for all values less than 1 that are given in the "Rate of Application" table on page 3 and the "Dosages For Various Concentrations in PPM" table on page 4. The leading zeroes are missing in two places in the first table and three places in the second table.

A stamped copy of the label is enclosed for your records. Submit one copy of your final printed labeling incorporating these changes before you release the product for shipment.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Joanne I. Miller".

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

Hydrothol 191

AQUATIC ALGICIDE AND HERBICIDE

ACTIVE INGREDIENT:

Mono(N,N-dimethylalkylamine**) salt of endothall* 53.0%

INERT INGREDIENTS:

47.0%

TOTAL

100.0%

Contains 2 lb. endothall* per gallon

*7-oxabicyclo [2.2.1] heptane-2,3-dicarboxylic acid equivalent 23.36%

**Alkyl groups as derived from Coconut Oil

KEEP OUT OF REACH OF CHILDREN
DANGER

STATEMENT OF PRACTICAL TREATMENT

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 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.

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

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

EPA Registration No. 4581-174

EPA Establishment No. 4581-MI-1

Elf Atochem North America, Inc.
2000 Market Street
Philadelphia, PA 19103

Net Contents:

ACCEPTED
with COMMENTS
In EPA Letter Dated

APR 27 2000

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

4581-174

DIRECTIONS FOR USE

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

GENERAL INFORMATION

HYDROTHOL 191 is a liquid concentrate soluble in water and is a highly effective aquatic herbicide and algicide for use in irrigation and drainage canals, lakes and ponds. Apply when weeds and algae are actively growing. Note: Susceptibility of algae may vary due to subspecies, strains or environmental conditions. Dosage rates are measured in parts per million (ppm) endothall acid.

Necessary approval and/or permits should be obtained in states where required. Consult state water or conservation authorities before applying to public waters or to ponds, canals or streams which flow into public waters.

LAKES AND PONDS

Algae Control: Hydrothol is effective on a broad range of algae including: Zannichellia, Cladophora, Pithophora, Spirogyra, Chara, Nitella, Chorella, Hydrodictyon, Oscillatoria, Zygnema, Chlamydomas, Selenastrum, Anabaena, Oedogonium, Anacystis, Coelastrum, Pediastrum, Rhizoclonium, and Scenedesmus. Note: Susceptibility of algae may vary due to subspecies, strains or environmental conditions. Repeat treatments when algal growth reappears. See Rate of Application Table below.

Submerged Aquatics: Apply Hydrothol 191 at 0.7 gallons to 4.0 gallons per acre foot for control of aquatic weeds. Hydrothol 191 is effective on a broad range of aquatic weeds including: Hydrilla, Hygrophila, Naiad, Elodea canadensis, Egera densa, Coontail, Bur Reed, Milfoil, Pondweed (Potamogeton spp.) and Water Stargrass. Due to the toxicity to fish, the use of HYDROTHOL 191 for submerged aquatic weeds is suggested only by commercial applicators on a marginal or sectional rather than overall type treatment. Use dosages over 1.0 ppm on very narrow margins or in areas where some fish kill is not objectionable. Do not treat more than 1 / 10 of the lake or pond at one time with doses in excess of 1.0 ppm.

Rate Of Application

| Algae or Weed | Rate (ppm) | Gallons per Acre Ft |
|--|--------------|---------------------|
| Algae Planktonic Filamentous Branched | 0.05-1.5 ppm | 0.6-18.0 pints |
| Bur Reed | 2-3 ppm | 2.7-4.0 gal. |
| Cabomba | 2-3 ppm | 2.7-4.0 gal. |
| Coontail | 0.5-1.5 ppm | 0.7-2.1 gal. |
| Egeria densa | 2-3 ppm | 2.7-4.0 gal. |
| Elodea canadensis | 2-3 ppm | 2.7-4.0 gal. |
| Hydrilla | 1-2 ppm | 1.4 - 2.7 gal. |
| Hygrophila | 2-3 ppm | 2.7-4.0 gal. |
| Milfoil | 1-2 ppm | 1.4 -2.7 gal. |
| Naiad (Najas spp.) | 1-1.5 ppm | 1.4-2.1 gal. |
| Pondweed (Potamogeton spp.) | .5-2 ppm | .7-2.7 gal. |
| Water Stargrass | 2-3 ppm | 2.7-4.0 gal. |

IRRIGATION AND DRAINAGE CANALS

Apply HYDROTHOL 191 as a surface spray with uniform coverage or inject under the surface of the water. The minimum contact time with weeds for optimum results should be two hours.

HEAVY INFESTATION---Apply at rate of 4.0 to 6.75 gal. per acre foot (equivalent to 3.0-5.0 ppm). See table below.

MODERATE OR LIGHT INFESTATIONS---Apply at rate of 1.4 to 2.7 gal. per acre foot (equivalent to 1.0-2.0 ppm). See table below.

GALLONS OF HYDROTHOL 191 REQUIRED TO TREAT 1 MILE OF DITCH, 1 FOOT DEEP

WIDTH OF DITCH OR CANAL IN FEET

| ppm | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.0 | 0.7 | 1.0 | 1.3 | 1.7 | 1.9 | 2.3 | 2.6 | 2.9 | 3.3 | 3.6 |

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 2.0 | 1.3 | 2.0 | 2.6 | 3.3 | 3.9 | 4.6 | 5.2 | 5.9 | 6.5 | 7.2 |
| 3.0 | 2.0 | 2.8 | 3.9 | 4.9 | 5.9 | 6.8 | 7.8 | 8.8 | 9.8 | 10.8 |
| 4.0 | 2.6 | 3.9 | 5.2 | 6.6 | 7.8 | 9.1 | 10.4 | 11.8 | 13.1 | 14.4 |
| 5.0 | 3.2 | 4.9 | 6.5 | 8.2 | 9.7 | 11.5 | 13.1 | 14.7 | 16.4 | 18.0 |

Note: 1.1 pint HYDROTHOL 191 per acre foot equals 0.1 ppm of endothall (acid).

APPROXIMATE QUANTITY OF HYDROTHOL 191 FOR ONE ACRE* TREATMENT

| DEPTH | DOSAGES FOR VARIOUS CONCENTRATIONS IN PPM | | | | | | | | | |
|-------|---|---------|----------|---------|---------|---------|---------|----------|----------|--|
| | 0.05 | 0.1 | 0.2 | 0.3 | 0.5 | 0.8 | 1.0 | 2.0 | 5.0 | |
| 1 ft. | 0.6 pts | 1.1 pts | 2.2 pts | .4 gal | .7 gal | 1.1 gal | 1.4 gal | 2.7 gal | 6.8 gal | |
| 2 ft. | 1.1 pts | 2.2 pts | 4.3 pts | .8 gal | 1.4 gal | 2.2 gal | 2.8 gal | 5.4 gal | 13.6 gal | |
| 4 ft. | 2.2 pts | 4.3 pts | 8.6 pts | 1.6 gal | 2.7 gal | 4.4 gal | 5.4 gal | 10.9 gal | 27.2 gal | |
| 6 ft. | 3.3 pts | 6.5 pts | 12.9 pts | 2.5 gal | 4.1 gal | 6.5 gal | 8.2 gal | 16.3 gal | 40.8 gal | |

*One acre equals approximately 208' times 208'

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

DANGER

CORROSIVE, CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS. MAY BE FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WEAR PROTECTIVE CLOTHING, RUBBER GLOVES, AND GOGGLES OR FACE SHIELD WHEN HANDLING. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse. Do not breathe vapor or spray mist.

ENVIRONMENTAL HAZARDS

Fish may be killed by dosages in excess of 0.3 ppm.

Avoid contact with or drift to desirable plants or crops as injury may result.

Clean out application equipment after each operation.

Do not use fish from treated areas for food or feed within three days after treatment.

Do not use water from treated areas for watering livestock, for preparing agricultural sprays for food crops, for irrigation of food crops, or for domestic purposes within the following periods:

Up to 0.3 ppm--- 7 days after application

Up to 3.0 ppm---14 days after application

Up to 5.0 ppm---25 days after application

Treated water can be used to irrigate non-food or feed crops, established ornamentals, and non-crop areas immediately.

STORAGE AND DISPOSAL

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

Storage Instructions: Store in the original container. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. In the event of spillage during handling or storage, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal Instructions listed below.

Pesticide Disposal Instructions: 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 Instructions: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY AND DISCLAIMER

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