

APR 25 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  
Hydrathol 191 Granular Aquatic Algicide and Herbicide  
EPA Registration Number: 4581-172  
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. 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 oramentals, and non-crop areas immediately."

2. At the top of the fourth page, insert a zero (0) before the decimal point in ".05", so that the beginning of the sentence reads: "Low rates of 0.05 - 0.2 ppm should be used on light infestations ..."

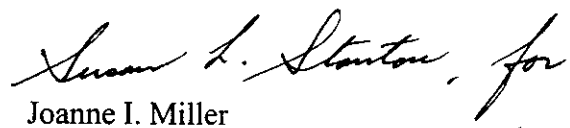
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CONCURRENCES

SYMBOL ▶	7505C							
SURNAME ▶	S. Stanton							
DATE ▶	Apr 25, 2000							

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,



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

Enclosure

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

APR 25 2000

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

4581-172

## Hydrothol 191 Granular AQUATIC ALGICIDE AND HERBICIDE

### ACTIVE INGREDIENT:

Mono(N,N-dimethylalkylamine\*) salt of endothall\*\* 11.2%

INERT INGREDIENTS: 88.8%

TOTAL 100.0%

\*Alkyl groups as derived from Coconut Oil

\*\*7-oxabicyclo [2.2.1] heptane-2,3-dicarboxylic acid equivalent 5%

**KEEP OUT OF REACH OF CHILDREN  
DANGER**

### STATEMENT OF PRACTICAL TREATMENT

**IF IN EYES**, hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Call a physician.

**IF SWALLOWED**, drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

**IF ON SKIN**, immediately flush with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before reuse.

**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. 4581-172  
228-IL-1

EPA Establishment No.

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

Net Contents:

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

#### DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED. DO NOT GET IN EYES OR ON CLOTHING. AVOID CONTACT WITH SKIN. WEAR GOGGLES OR FACE SHIELD WHEN HANDLING. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

### ENVIRONMENTAL HAZARDS

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

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

### GENERAL INFORMATION

HYDROTHOL 191 Granular is a highly effective contact algicide and aquatic herbicide 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.

### DIRECTIONS FOR USE

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

### LAKES AND PONDS

**ALGAE CONTROL:** Hydrothol 191 Granular 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. Generally rates of 0.05 to 0.3 ppm (3-16 lbs. per acre foot) are effective for the control of planktonic, filamentous and branched algae. Repeat applications when algae reappears and reaches treatment levels. Dosages may be increased

(from 0.3 to 1.5 ppm) where greater longevity of control is desired or to improve efficacy on species that prove difficult to control. Due to the potential for fish toxicity at higher rates, it is suggested that applications above 0.3 ppm be made only by commercial applicators as marginal or sectional treatments. For floating mats Hydrothol 191 Granular should be applied as evenly as possible.

**SUBMERGED AQUATIC PLANTS:** Apply Hydrothol 191 Granular at 0.5 to 3.0 ppm (27 lbs. to 162 lbs. per acre foot) for control of aquatic weeds. Hydrothol 191 Granular is effective on a broad range of aquatic weeds including: Hydrilla, Hygrophila, Naiad, Elodea canadensis, Egeria densa, Coontail, Bur Reed, Milfoil, Pondweed (Potamogeton spp.) and Water Stargrass. Due to the toxicity to fish, the use of Hydrothol 191 Granular 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: Lakes and Ponds

Algae or Weed	Rate (ppm)	Pounds per Acre Ft
Algae Planktonic Filamentous Branched	0.05-1.5 ppm*	3-81 lbs.
Bur Reed	2-3 ppm	108-162 lbs.
Cabomba	2-3 ppm	108-162 lbs.
Coontail	0.5-1.5 ppm	27-81 lbs.
Egeria densa	2-3 ppm	108-162 lbs.
Elodea canadensis	2-3 ppm	108-162 lbs.
Hydrilla	1-2 ppm	54-108 lbs.
Hygrophila	2-3 ppm	108-162 lbs.
Milfoil	1-2 ppm	54-108 lbs.
Naiad (Najas spp.)	1-1.5 ppm	54-81 lbs.
Pondweed (Potamogeton spp.)	0.5-2 ppm	27-108 lbs.
Water Stargrass	2-3 ppm	108-162 lbs.

\*See specific use instructions under Algae Control

Low rates of .05 - 0.2 ppm should be used on light infestation of planktonic and filamentous algae. Higher rates should be used for branched algae species. Moderate algae infestations generally require 0.2 - 0.5 ppm. Marginal treatments require 0.3-0.8 ppm.

**IRRIGATION AND DRAINAGE CANALS**

**Rate of Application: Irrigation and Drainage Canals**

Algae controlled: planktonic, filamentous and branched algae, including Zannichellia, Cladphora, Pithophora, Spirogyra, Chara, Nitella, Chorella, Hydrodictyon, Oscillatoria, Zygnema, Chlamydomas, Selenastrum, Anabaena, Oedgonium, Anacystis, Coelastrum, Pediastrum, Rhizoclonium, and Scenedesmus. Submersed aquatic plants controlled: Hydrilla, Hygrophila, Naiad, Elodea candensis, Egera densa, Coontail, Bur Reed, Milfoil, Pondweed (Potomogeton spp.) and Water Stargrass. Due to fish toxicity, application utilizing rates higher than 0.3 ppm should be made by commercial applicators only.

HEAVY INFESTATIONS---Apply 3 to 5 ppm (162 to 270 lbs.) HYDROTHOL 191 Granular per acre foot of water with suitable aerial or ground application equipment.

MODERATE OR LIGHT INFESTATIONS---Apply 1 to 2 ppm (54 to 109 lbs.) HYDROTHOL 191 Granular per acre foot of water with suitable aerial or ground application equipment.

**IRRIGATION AND DRAINAGE CANAL APPLICATIONS**

Pounds of HYDROTHOL 191 Granular required per mile of canal or swath, 1 ft. deep.						
Width of Canal, Ditch or Swath						
ppm	10	15	20	30	40	
0.5	33	49	65	95	130	
1.0	65	98	130	190	260	
2.0	130	195	260	380	520	
3.0	195	294	390	570	780	
4.0	260	392	520	760	1040	
5.0	325	490	650	950	1300	

Note: 5.5 lbs. per acre foot equals 0.1 ppm of Endothall (acid).

**LAKES AND PONDS APPLICATIONS**

Depth	PPM Concentrations						
	0.05 ppm	0.1 ppm	0.2 ppm	0.5 ppm	1.0 ppm	1.5 ppm	5.0 ppm
1 ft.	3	5	11	27	54	82	250
2 ft.	5	11	22	54	109	163	550
4 ft.	11	22	44	109	217	326	1100
6 ft.	16	33	65	163	326	489	1650

\*One acre equals approximately 208' times 208'.

**STORAGE AND DISPOSAL**

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

**Storage Instructions:** Store in the original container, preferably in a locked storage area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling sweep up spillage and dispose of in accordance with the Pesticide Disposal Instructions listed below.

**Pesticide Disposal Instructions:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide 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**

Elf Atochem North America warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use, subject to the risks referred to therein. ELF ATOCHEM MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL ELF ATOCHEM OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, BUSINESS REPUTATION, OR CUSTOMERS; LABOR COSTS; OR OTHER EXPENSES INCURRED IN PLANTING OR HARVESTING.

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