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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

POISON



STATEMENT OF PRACTICAL TREATMENT

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 IN EYES, immediately flush with plenty of water for at least 15 minutes. Call a physician.

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

See Side Panel for Additional Precautionary Statements



EPA Registration No. 4581-174

EPA Establishment No. 4581-TX-1

Net Contents _____ Gallons/ _____ Liters

AGCHEM DIVISION—ATO CHEM NORTH AMERICA

Philadelphia, PA 19102

ACCEPTED

APR 02 1981

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
this pesticide is registered
EPA Reg. No. 4581-174

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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 to control the following weeds and algae: Najas, Elodea, Coontail, Potamogeton, Milfoil sp., Zannichellia, Vallisneria, Cladophora, Pithophora, Spirogyra, and Chara, when weeds are actively growing. Dosage rates indicated are measured in "Parts per Million" (ppm). 1.0 ppm as a dosage rate means that there would be 1 part endothall (acid) in 1,000,000 parts of water.

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.

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

ppm	Width of Ditch or Canal in Feet									
	4	6	8	10	12	14	16	18	20	22
1.0 ppm	0.7	1.0	1.3	1.7	1.9	2.3	2.6	2.9	3.3	3.6
2.0 ppm	1.3	2.0	2.6	3.3	3.9	4.6	5.2	5.9	6.5	7.2
3.0 ppm	2.0	2.8	3.9	4.9	5.9	6.8	7.8	8.8	9.8	10.8
4.0 ppm	2.6	3.9	5.2	6.6	7.8	9.1	10.4	11.8	13.1	14.4
5.0 ppm	3.2	4.9	6.5	8.2	9.7	11.5	13.1	14.7	16.4	18.0

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

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LAKES AND PONDS

ALGAE CONTROL: Cladophora, Pithophora, Spirogyra, and Chara can be controlled with applications of 0.6 to 2.2 pints per acre foot (0.05 to 0.2 ppm) applied as a uniform surface spray or injected under water surface. Pithophora may require 0.2 ppm or higher. Dosages may be increased to 0.4 to 1.1 gals (0.3 to 0.8 ppm) where greater longevity of control is desired and for marginal treatments. Repeat treatments when algal growth reappears.

SUBMERGED AQUATICS: 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 0.7 to 3.4 gals. per acre foot (0.5 to 2.5 ppm) on a marginal treatment either sprayed on or injected below the surface. 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.

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	40.6 gal

*One acre equals approximately 208' x 208'

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS
(AND DOMESTIC ANIMALS)

DANGER

FATAL IF ABSORBED THROUGH SKIN. MAY BE FATAL IF SWALLOWED. CORROSIVE, CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS. HARMFUL IF INHALED. 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. Avoid breathing spray mist.

ENVIRONMENTAL HAZARDS

Fish will be killed by dosages in excess of 0.3 ppm. Do not use where fish are important resources.

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 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

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.

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