



HYDROTHOL® 191

GRANULAR AQUATIC ALGICIDE AND HERBICIDE

ACTIVE INGREDIENT:

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

OTHER 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**

FIRST AID:

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

IF INHALED:

- Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for treatment advice.

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF ON SKIN:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact (303) 623-5716 for emergency medical treatment information.

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 Back Panel for Additional Precautionary Statements

EPA Registration No. 4581-172-82695

EPA Establishment No. 62171-MS-003

Net Weight _____

Sold by:
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Cerexagri-Nisso LLC

**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 and before eating, drinking, chewing gum, or using tobacco. 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. Not for use in brackish or salt water.

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

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 planktonic, filamentous, and branched algae. 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 algae. Repeat applications when algae reappear and reach 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, Cabomba*, Coontail, Bur Reed*, Milfoil, Pondweed (Potamogeton spp.), Vallisneria, Zannichellia 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.

*Not for this use in California

RATE OF APPLICATION: LAKES AND PONDS

Algae or Weed	Rate (ppm)	Pounds per Acre Ft.
Algae Planktonic Filamentous Branched (Use in California limited to Cladophora, Pithophora, Spirogyra, Chara)	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.
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.
Vallisneria	2-3 ppm	108-162 lbs.
Zannichellia	1-2 ppm	54-108 lbs.

*Not for this use in California

**See specific use instructions under Algae Control

Low rates of 0.05-0.2 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.

RATE OF APPLICATION: IRRIGATION AND DRAINAGE CANALS

Algae Controlled: Planktonic, filamentous and branched algae (Use in California limited to Cladophora, Pithophora, Spirogyra, Chara). Submerged aquatic plants controlled: Hydrilla, Hygrophila*, Naiad, Elodea canadensis, Cabomba*, Coontail, Bur Reed*, Milfoil, Pondweed (Potamogeton spp.), Vallisneria, Zannichellia, 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 108 lbs.) HYDROTHOL 191 Granular per acre foot of water with suitable aerial or ground application equipment.

IRRIGATION AND DRAINAGE CANAL APPLICATIONS

ppm	Pounds of HYDROTHOL 191 Granular required per mile of canal or swath, 1 ft. deep.				
	WIDTH OF CANAL, DITCH OR SWATH				
	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).

LAKE AND POND APPLICATIONS

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

*One acre equals approximately 208' x 208'

STORAGE AND DISPOSAL

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

Pesticide 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.

EMERGENCY TELEPHONE NUMBERS:

**CHEMTREC: (800) 424-9300
MEDICAL: (303) 623-5716 Rocky Mountain Poison Control Center**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials, resistant strains or other influencing factors in the use of the product. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Cerexagri-Nisso LLC, Manufacturer and Seller harmless for any claims relating to such factors. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CEREXAGRI-NISSO LLC AND MANUFACTURER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

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