



# AQUATHOL<sup>®</sup> K

## AQUATIC HERBICIDE

**ACTIVE INGREDIENT:**

Dipotassium salt of endothall\* ..... 40.3%

**OTHER INGREDIENTS:** ..... 59.7%

**TOTAL** ..... 100.0%

\*7-oxabicyclo [2.2.1]heptane-2,3-dicarboxylic acid equivalent 28.6%

Contains 4.23 lbs. dipotassium endothall per gallon

### 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 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 OR CLOTHING:**

- 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.

**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.

**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 866-673-6671 (Rocky Mountain Poison Control Center) for emergency medical treatment information.

See inside for additional precautionary statements.

**NOTE TO PHYSICIAN:** Measures against circulatory shock, respiratory depression, and convulsion may be needed.

EPA Registration No. 70506-176

EPA Establishment No. 62171-MS-003

**Net Contents: 2.5 Gallons**



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**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER**

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING. AVOID BREATHING VAPORS OR SPRAY MIST. PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTIONS IN SOME INDIVIDUALS.

**Personal Protective Equipment (PPE)**

Mixers, loaders, applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant footwear plus socks,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant headgear for overhead exposure,
- Goggles or face shield,
- Chemical-resistant apron when mixing, loading, or cleaning equipment, and
- a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any N, R, P, or HE filter.

**Exception:** During application, the respirator need not be worn, provided that the pesticide is applied in a manner (such as direct metering or subsurface release from the rear of a vessel that is moving into the wind) such that the applicator will have no contact with the pesticide.

See Engineering Controls for additional requirements.

**User Safety Requirements:**

Follow the manufacturers' instructions for cleaning/maintaining PPE. If no such instructions for washable exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them.

**Engineering Controls:**

When mixers and loaders use a closed system designed by the manufacturer to enclose the pesticide to prevent it from contacting handlers or other people AND the system is functioning properly and is used and maintained in accordance with the manufacturers written operating instructions, the handlers need not wear a respirator, provided the required respirator is immediately available for use in an emergency such as a spill or equipment breakdown.

**User Safety Recommendations:**

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

User should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. This pesticide is toxic to wildlife. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters or rinsate.

**PRODUCT INFORMATION**

Aquathol K is a liquid concentrate soluble in water which is effective against a broad range of aquatic plants.

Dosage rates indicated for the application of Aquathol K are measured in "Parts Per Million" (ppm) of dipotassium endothall. Only 0.5 to 5.0 ppm are generally required for aquatic weed control.

**DIRECTIONS FOR USE**

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

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

Wash out spray equipment with water after each operation.

Not for use in brackish or saltwater.

Treated water can be used for sprinkling bentgrass immediately.

**HOW TO APPLY:**

Aquathol K is a contact herbicide; consequently, do not apply before weeds are present. Application as early as possible after weeds appear and are actively growing is recommended for best results.

If an entire pond is treated at one time, or if the dissolved oxygen level is low at time of application, decay of weeds may remove enough oxygen from the water, causing fish to suffocate. Water containing very heavy vegetation should be treated in sections to prevent suffocation of fish. Sections should be treated 5-7 days apart. Carefully measure size and depth of area to be treated and determine amount of Aquathol K to apply from chart.

Aquathol K should be sprayed on the water or injected below the water surface and should be distributed as evenly as possible. It may be applied as a concentrate or diluted with water depending on the equipment. Some dilution will give better distribution. For best results apply when water is quiescent and/or flows are minimal.

In instances where the weed(s) to be controlled is an exposed surface problem (i.e., some of the broad-leaved pond weeds) coverage is important. For best results apply the concentrate or with the least amount of water compatible with the application equipment. Necessary approval and/or permits should be obtained in states where required.

## Drinking Water (Potable Water)

- Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits. The drinking water (potable water) restrictions on this label are to ensure that consumption of water by the public is allowed only when the concentration of endothall in the water is less than the MCL (Maximum Contamination Level) of 0.1 ppm. Applicators should consider the unique characteristics of the treated waters to assure that endothall concentrations in potable drinking water do not exceed 0.1 ppm at the time of consumption.
- For applications of endothall, the drinking water setback distance from functioning potable water intakes is greater than or equal to 600 feet.
- **Note:** Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.

Only use higher rates when making treatments to small areas with an increased potential for rapid dilution or when making long and narrow applications such as for boat lanes or shoreline treatments where dilution may reduce the exposure of plants and the herbicide. Use lower rates for large contiguous treatment blocks or in protected areas such as coves where reduced water movement will not result in rapid dilution of the herbicide from the target treatment area or when treating entire lakes or ponds.

## AQUATIC WEEDS CONTROLLED AND DOSAGE RATE CHARTS

Aquathol K is recommended for the control of the following aquatic weeds in drainage canals, ponds and lakes at the rates indicated. Since the active ingredient is water soluble and tends to diffuse from the treated area, select the dosage rate applicable to the area to be treated. Use the lower rate in each range of rates where the growth is young and growing and/or where the weed stand is not heavy. Marginal treatments of large bodies of water require higher rates as indicated.

| Aquatic Weed                                   | RATES                                    |                      |                               |                      |
|--|--|----------------------|-------------------------------|----------------------|
|  | Entire Pond/Lake or Large Area Treatment | Gallons per Acre Ft. | Spot or Lake Margin Treatment | Gallons per Acre Ft. |
| Bur Reed, <i>Sparganium</i> spp.               | 3.0-4.0 ppm                              | 1.9-2.6 gal.         | 4.0-5.0 ppm                   | 2.6-3.2 gal.         |
| Coontail, <i>Ceratophyllum</i> spp.            | 1.0-2.0 ppm                              | 0.6-1.3 gal.         | 2.0-3.0 ppm                   | 1.3-1.9 gal.         |
| Horned Pondweed, <i>Zannichellia palustris</i> | 1.0-2.0 ppm                              | 0.6-1.3 gal.         | 2.0-3.0 ppm                   | 1.3-1.9 gal.         |
| Hydrilla, <i>Hydrilla verticillata</i>         | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |
| Hygrophila, <i>Hygrophila polysperma</i>       | 4.0-5.0 ppm                              | 2.6-3.2 gal.         | 5.0 ppm                       | 3.2 gal.             |
| Milfoil, <i>Myriophyllum</i> spp.              | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |
| Naiad, <i>Najas</i> spp.                       | 1.0-3.0 ppm                              | 0.6-1.9 gal.         | 2.0-4.0 ppm                   | 1.3-2.6 gal.         |
| Pondweed, <i>Potamogeton</i> spp.              | 0.5-3.0 ppm                              | 0.3-1.9 gal.         | 1.5-4.0 ppm                   | 1.0-2.6 gal.         |
| Including:                                     |  |                      |                               |                      |
| American, <i>P. nodosus</i>                    | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |
| Largeleaf (Bass Weed), <i>P. amplifolius</i>   | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |
| Curlyleaf, <i>P. crispus</i>                   | 0.5-1.5 ppm                              | 0.3-1.0 gal.         | 1.5-3.0 ppm                   | 1.0-1.9 gal.         |
| Flatstem, <i>P. zosteriformis</i>              | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |
| Floating-leaf, <i>P. natans</i>                | 1.0-2.0 ppm                              | 0.6-1.3 gal.         | 2.0-3.0 ppm                   | 1.3-1.9 gal.         |
| Illinois, <i>P. illinoensis</i>                | 1.5-2.5 ppm                              | 1.0-1.6 gal.         | 2.5-3.5 ppm                   | 1.6-2.3 gal.         |
| Narrowleaf, <i>P. pusillus</i>                 | 1.0-2.0 ppm                              | 0.6-1.3 gal.         | 2.0-3.0 ppm                   | 1.3-1.9 gal.         |
| Threadleaf, <i>P. filiformis</i>               | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |
| Sago, <i>P. pectinatus</i>                     | 1.0-2.0 ppm                              | 0.6-1.3 gal.         | 2.0-3.0 ppm                   | 1.3-1.9 gal.         |
| Variable Leaf, <i>P. diversifolius</i>         | 1.0-2.0 ppm                              | 0.6-1.3 gal.         | 2.0-3.0 ppm                   | 1.3-1.9 gal.         |
| Parrotfeather, <i>Myriophyllum aquaticum</i>   | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |
| Water Stargrass, <i>Heteranthera</i> spp.      | 2.0-3.0 ppm                              | 1.3-1.9 gal.         | 3.0-4.0 ppm                   | 1.9-2.6 gal.         |

## LAKES AND PONDS

### Restrictions for Lakes and Ponds Only:

Do not contaminate water intended for domestic purposes.

Do not use treated water for animal consumption or for domestic purposes within the following periods:

- 0.5 ppm dipotassium salt — 7 days after application
- 4.25 ppm dipotassium salt — 14 days after application
- 5.0 ppm dipotassium salt — 25 days after application

### RATE OF APPLICATION — LAKES AND PONDS

The following chart indicates the total quantity of material to be applied.

APPROXIMATE GALLONS OF AQUATHOL K FOR ONE ACRE (208' X 208') TREATMENT

| DEPTH | DOSAGE IN GALLONS FOR VARIOUS CONCENTRATIONS IN PPM |         |         |         |         |         |         |
|-------|---|---------|---------|---------|---------|---------|---------|
|       | 0.5 ppm   | 1.0 ppm | 1.5 ppm | 2.0 ppm | 3.0 ppm | 4.0 ppm | 5.0 ppm |
| 1 ft. | 0.3   | 0.6     | 1.0     | 1.3     | 1.9     | 2.6     | 3.2     |
| 2 ft. | 0.6   | 1.3     | 1.9     | 2.6     | 3.8     | 5.1     | 6.4     |
| 4 ft. | 1.3   | 2.6     | 3.8     | 5.1     | 7.7     | 10.2    | 12.8    |
| 6 ft. | 1.9   | 3.8     | 5.8     | 7.6     | 11.5    | 15.3    | 19.2    |

## DRAINAGE CANALS

### Restrictions for Drainage Canals Only:

Do not contaminate water intended for domestic purposes.

Do not use treated water for domestic purposes within the following periods:

- 0.5 ppm dipotassium salt — 7 days after application
- 4.25 ppm dipotassium salt — 14 days after application
- 5.0 ppm dipotassium salt — 25 days after application

### RATE OF APPLICATION — DRAINAGE CANALS

Apply in a manner to achieve the desired rate and adequate mixing so the product is distributed throughout the entire water column. Adequate concentration (rate) and exposure time (length of treatment) will impact the efficacy of the herbicide (endothall) on the target weed species. Although endothall is a contact herbicide adequate exposure time is critical. The rates and the length of treatment are guidelines to provide control of the target species and assume that the entire canal is treated. This rate chart has been developed based on Concentration Exposure Time (CET) data for endothall. The CET concept allows rates and the length of exposure to be adjusted for different treatment scenarios.

|  |             |             |             |             |             |   |
|--|-------------|-------------|-------------|-------------|-------------|---|
| <b>Target Weed:</b><br>Milfoil (Myriophyllum spp.)<br>Parrotfeather (Myriophyllum spp.)<br>Pondweeds (Potamogeton spp.)  | 0.5-1.0 ppm | 1.0-2.0 ppm | 2.0-3.0 ppm | 3.0-4.0 ppm | 4.0-5.0 ppm | <b>Restriction</b><br>A maximum of 30 ppm per growing season, not to exceed 5 ppm per application.<br>A minimum of a 7-day application interval, with no PHI. |
| <b>Length of Treatment</b>   | 48 hrs.     | 24 hrs.     | 12 hrs.     | 8 hrs.      | 6 hrs.      |   |
| <b>Target Weed:</b><br>Coontail (Ceratophyllum spp.)<br>Horned Pondweed (Zannichellia spp.)<br>Hydrilla (Hydrilla verticillata)<br>Naiad (Najas spp.)<br>Water Stargrass (Heteranthera spp.) | 0.5-1.0 ppm | 1.0-2.0 ppm | 2.0-3.0 ppm | 3.0-4.0 ppm | 4.0-5.0 ppm |   |
| <b>Length of Treatment</b>   | 72 hrs.     | 36 hrs.     | 18 hrs.     | 12 hrs.     | 8 hrs.      |   |
| Hygrophila (Hygrophila polysperma) may be suppressed at the higher application rates listed in this table.   |             |             |             |             |             |   |

To calculate the amount of Aquathol K required for a particular treatment use the following formula;

$$[\text{Cubic Feet per Second (CFS)} \times \text{Length of Treatment (hrs.)} \times \text{rate (ppm)}] \times 0.052947 = \text{Gallons of Aquathol K needed for treatment}$$

To calculate the amount of Aquathol K to be applied per hour use the following formula:

$$\text{Gallons of Aquathol K per hour} = \text{Total gallons of Aquathol K} / \text{Length of Treatment (hrs.)}$$

The "Directions For Use" of this product reflect the cumulative inputs from both historical field use and product testing programs. Actual field conditions may vary. Phytotoxicity is not expected, however all crop (species) and cultivars (varieties) have not been tested.

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in the original container. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. Storage at temperatures below 32°F may result in the product freezing or crystallizing. Should this occur the product must be warmed to 50°F or higher and thoroughly agitated. In the event of a 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:** 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 Handling: Nonrefillable container. Do not reuse or refill this container.** Triple rinse or pressure rinse container promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Or

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Then offer for recycling if available 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: (866) 673-6671 Rocky Mountain Poison Control Center**

## IMPORTANT INFORMATION READ BEFORE USING PRODUCT

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks 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 or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

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