



cerexagri

# AQUATHOL (R) SUPER K

Material Safety Data Sheet

Cerexagri, Inc.

## 1 PRODUCT AND COMPANY IDENTIFICATION

### Agrichemicals Group

Cerexagri, Inc.  
630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406

### EMERGENCY PHONE NUMBERS:

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887  
Medical: Rocky Mountain Poison Control Center  
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
R&D Technical Service	610-878-6100	8:00am to 5:00pm EST
Customer Service	1-800-438-6071	8:00am - 5:00 pm EST

Product Name AQUATHOL (R) SUPER K  
Product Synonym(s)

Chemical Family Dicarboxylic acid  
Chemical Formula C8H8O5K2  
Chemical Name Dipotassium endothall  
EPA Reg Num 4581-388  
Product Use Aquatic herbicide

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical Wt. %	OSHA
Endothal-potassium	2164-07-0	63.0 %	Y
2-Propenamide, polymer with potassium	31212-13-2	27.5%	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

## 3 HAZARDS IDENTIFICATION

### Emergency Overview

Beige granular material, odorless.  
KEEP OUT OF REACH OF CHILDREN.  
DANGER!  
Causes irreversible eye damage  
MAY BE FATAL IF SWALLOWED.  
HARMFUL IF ABSORBED THROUGH SKIN.

Do not get in eyes, on skin or on clothing.  
Avoid breathing dust.

### Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on single exposure animal tests, it is considered to be moderately toxic if swallowed, no more than slightly toxic if absorbed through skin, severely irritating to eyes and slightly irritating to skin.

**4 FIRST AID MEASURES****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 eye.
- Call a poison control center or doctor for treatment advice.

**IF ON SKIN,** immediately wash with cool/cold water. If irritation develops, immediately obtain medical attention.

**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 to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**IF INHALED,**

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

**5 FIRE FIGHTING MEASURES****Fire and Explosive Properties**

Auto-Ignition Temperature	NE	
Flash Point	NE	Flash Point Method
Flammable Limits- Upper	NE	
Lower	NE	

**Extinguishing Media**

Use water spray, carbon dioxide, foam or dry chemical.

**Fire Fighting Instructions**

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

**Fire and Explosion Hazards**

None known.

**6 ACCIDENTAL RELEASE MEASURES****In Case of Spill or Leak**

Contain spill. Sweep or scoop up and remove to suitable container. Flush with water. Prevent spilled product from entering sewers or natural water. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

**7 HANDLING AND STORAGE**



## AQUATHOL (R) SUPER K

Material Safety Data Sheet

Cerexagri, Inc.

### 7 HANDLING AND STORAGE

#### Handling

Do not breathe dust. Avoid contact with eyes, skin and clothing.  
Wash thoroughly after handling. Keep container closed.  
Empty container may contain hazardous residues.  
KEEP OUT OF REACH OF CHILDREN.

#### Storage

Do not store in a manner where cross-contamination with pesticides, fertilizers, food or feed could occur.

### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

#### Engineering Controls

Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposure. Dilution ventilation is acceptable, but local mechanical exhaust ventilation preferred, if practical, at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

#### Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

#### Skin Protection

Minimize skin contamination by following good industrial hygiene practice. Wearing rubber gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

#### Respiratory Protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

#### Airborne Exposure Guidelines for Ingredients

The components of this product have no established Airborne Exposure Guidelines

- Only those components with exposure limits are printed in this section.
- Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.
- ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.
- WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.



cerexagri

# AQUATHOL (R) SUPER K

Material Safety Data Sheet

Cerexagri, Inc.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor	Beige granular material, odorless.
pH	6.9 (1% aqueous soln)
Specific Gravity	0.607 g/cm <sup>3</sup>
Vapor Pressure	Negligible
Vapor Density	N/A
Melting Point	N/A
Freezing Point	N/A
Boiling Point	N/A
Solubility In Water	>65 g/100ml
Evaporation Rate	N/A
Percent Volatile	N/A

## 10 STABILITY AND REACTIVITY

### Stability

This material is chemically stable under normal and anticipated storage and handling conditions.

### Hazardous Polymerization

Does not occur.

### Incompatibility

None known.

### Hazardous Decomposition Products

Elevated temperatures convert endothal to anhydride, a strong vesicant, causing blisters of eyes, mucous membranes, and skin.

## 11 TOXICOLOGICAL INFORMATION

### Toxicological Information

Data on this material and/or its components are summarized below.

Single exposure (acute) studies indicate:

Oral - Moderately Toxic to Rats (LD<sub>50</sub> 98 mg/kg)

Dermal - No More than Slightly Toxic to Rabbits (LD<sub>50</sub> >2,000 mg/kg)

Eye Irritation - Severely Irritating to Rabbits

Skin Irritation - Slightly Irritating to Rabbits

No skin allergy was observed in guinea pigs following repeated exposure.

Endothal-potassium (technical active ingredient)

Although no allergic skin reactions were observed in guinea pigs following exposure to this material in water, allergic skin reactions were observed following exposure to this material in ethanol. Repeated application to the skin of rats produced severe skin irritation, liver and kidney effects considered to be secondary to irritation, and increased mortality. Long-term dietary administration produced no adverse effects in rats.

## 12 ECOLOGICAL INFORMATION



**12 ECOLOGICAL INFORMATION**

**Ecotoxicological Information**

Data on this material and/or its components are summarized below.

Endothal-potassium (technical active ingredient)

This material is practically non-toxic to bluegill sunfish (LC50 316-501.2 mg/l), rainbow trout (LC50 107-528.7 mg/l), eastern oysters (LC50 117 mg/l), largemouth bass (LC50 130 mg/l), fiddler crab (LC50 752.4 mg/l) and sheepshead minnow (LC50 340 mg/l), and slightly toxic to mysid shrimp (LC50 79 mg/l) and smallmouth bass (LC50 47 mg/l). It is practically non-toxic to slightly toxic to Daphnia magna (EC50 72-319.5 mg/l) and no more than moderately toxic to freshwater blue-green algae (LC50 >4.8 mg/l), freshwater diatoms (LC50 >3.6 mg/l), freshwater green algae (LC50 >4.8 mg/l) and marine diatoms (LC50 >9.0 mg/l).

The 8-day LC50 for bobwhite quail and mallard ducklings is >5,000 ppm, the 21-day LD50 for mallard ducks is 344 mg/kg, the 14-day EC50 for duckweed is 0.84 mg/l and the 14-day LC50 for juvenile chinook salmon is 62.5 ppm.

Endothall

This material is slightly toxic to bluegill sunfish (96-hr LC50 77 mg/l), rainbow trout (96-hr LC50 49 mg/l), Daphnia magna (48-hr LC50 92 mg/l), eastern oysters (96-hr LC50 54 mg/l), mysid shrimp (96-hr LC50 39 mg/l) and fiddler crab (96-hr LC50 85.1 mg/l). It is practically non-toxic to sheepshead minnow (96-hr LC50 110 mg/l) and common mummichog (96-hr LC50 213.9 mg/l).

This material has an 8-day LC50 of >5,000 ppm (bobwhite quail and mallard ducklings), a 21-day LD50 of 111 mg/kg (mallard ducks), a 30-day MATC of 19 mg/l (fathead minnows) and a 21-day MATC of 6.7 mg/l (Daphnia magna). No adverse effects were observed in mallard ducks and bobwhite quail following repeated (20-weeks) administration in the diet.

**Chemical Fate Information**

Data on this material and/or its components are summarized below.

Endothal-potassium (technical active ingredient)

This material is rapidly degraded in aqueous systems by the indigenous microbial population to CO2 and other non-toxic natural products.

**13 DISPOSAL CONSIDERATIONS**

**Waste Disposal**

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.

**14 TRANSPORT INFORMATION**

DOT Name	Pesticides, solid, toxic, n.o.s.
DOT Technical Name	Endothall
DOT Hazard Class	6.1
UN Number	2588
DOT Packing Group	PG III
RQ	1,000 POUNDS

**15 REGULATORY INFORMATION**



# AQUATHOL (R) SUPER K

Material Safety Data Sheet

Cerexagri, Inc.

## Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	N
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

## Ingredient Related Regulatory Information:

### SARA Reportable Quantities

	CERCLA RQ	SARA TPQ
Endothal-potassium	NE	
2-Propenamide, polymer with potassium	NE	

### SARA Title III, Section 313

This product does contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. See Section 2

Endothal-potassium

## 16 OTHER INFORMATION

## Revision Information

Revision Date	13 JAN 2005	Revision Number	9
Supersedes Revision Dated	15-OCT-2004		

## Revision Summary

Add trademark and reference to sections 1 & 16

## Key

NE= Not Established    NA= Not Applicable    (R) = Registered Trademark

## Miscellaneous

Aquathol (R) is a registered trademark of Cerexagri, Inc.

Cerexagri, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of Cerexagri, Inc., Cerexagri, Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.