

SAFETY DATA SHEET

Aquathol® K

Date of Issue: 19 October 2021

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): Dipotassium endothall
Recommended use: Aquatic herbicide

Supplier: UPL New Zealand Limited
PO Box 51584, Pakuranga
Auckland
Phone 0800 100 325
www.upl-ltd.com/nz

Emergency telephone number: 0800 CHEM CALL (0800 243 622) 24 Hours

2. HAZARDS IDENTIFICATION



Hazard Classification: 6.1B, 8.3A, 6.9B, 9.1A, 9.2A, 9.3B

Required identification Details: **Signal Word: DANGER**
Keep out of reach of Children.
Read label before use.
Any person purchasing, handling or disposing of this product must be suitably qualified.

May be fatal in contact with skin.
Toxic if inhaled or swallowed.
Causes serious eye damage.
May cause damage to organs through prolonged or repeated exposure
Very toxic to aquatic life with long lasting effects.
Very toxic to the soil environment
Toxic to terrestrial vertebrates

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients		
Common name	CAS No	%
Dipotassium endothall	2164-07-0	40.3%

4. FIRST-AID MEASURES

Description of necessary first aid measures: In case of poisoning by any exposure route contact the National Poisons and Hazardous Chemicals Information Centre, PO Box 913, Dunedin. Phone 0800 764 766, (0800 POISON).

General information:	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, slightly toxic if absorbed through the skin or inhaled, non-irritating to skin and causes irreversible eye damage.
Inhalation:	Move person to fresh air. If person is not breathing, call 111 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
Ingestion:	Call the National Poisons Centre 0800 POISON (0800 764 766) or a 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 the poisons centre or doctor. DO NOT give anything by mouth to an unconscious person.
Skin contact:	Immediately wash with cool / cold water. If irritation develops, immediately obtain medical attention.
Eye contact:	Hold eye open and rinse slowly and gently with clean water for 15 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eyes. Call a doctor for treatment advice.
Notes to a physician:	Measures against circulatory shock, respiratory depression and convulsion may be required.

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:	2X
Extinguishing media:	Fog or fine water spray, foam, dry chemical or carbon dioxide.
Hazardous thermal (de)composition products:	Elevated temperatures may convert endothall to anhydride, a strong vesicant, causing blistering of eyes, mucous membranes and skin.
Protection of fire-fighters:	Remain upwind. Wear full protective clothing and self-contained breathing apparatus. Do not breath smoke or gases.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear protective clothing and personal protective equipment as described in section 8. Keep unprotected persons and animals out of the area.
Environmental precautions:	Keep material out of lakes, streams, ponds and sewer drains.
Methods for cleaning up:	Dyke to confine spill and absorb with inert materials such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label contents for disposal.

7. HANDLING AND STORAGE

Handling:	Do not breath vapour. Do not breathe mist. Wash thoroughly after handling. Keep container closed.
Storage:	Do not store in a manner where cross-contamination with pesticides, fertilisers, food or feed could occur. Refer to HAZNOTE or storage quantity controls.
Packaging materials:	HDPE Plastic Jerry cans.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Exposure Standards:	Not Established.
Outside the workplace:	TE _{water} 0.2 ppm dipotassium endothall. EEL _{water} 0086 ppm dipotassium endothall.

Engineering measures

Exposure control measures:	Provide ventilation if necessary to minimise exposure.
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Personal Protective Equipment

Detail specifications for equipment:

Respiratory system:

Where airborne exposure is likely wear, as a minimum, a properly fitted half-face or full-face air purifying respirator which is approved for pesticides. Respirator use and selection must be based on airborne concentrations.

Skin and body:

Nitrile rubber apron should be worn to prevent contact with the liquid. Wear long sleeved shirt, long pants.

Hands:

Wear Nitrile rubber gloves.

Eyes:

Wear chemical goggles or full face mask and have eye flushing equipment immediately available.

General hygiene:

Do not eat, drink or smoke when using. Wash hands and face before meals and after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Colour, Odour.

Yellow Brown liquid with slight chlorine odour.

pH:

7.4 (nominal)

Vapour Pressure:

Negligible.

Boiling Point:

> 100°C

Vapour Density:

Not Established

Freezing/melting point:

N/A

Solubility:

Miscible

Specific Gravity/Density:

1.285 g /ml

Flashpoint

NA

Information for flammable material:

Viscosity:

Octanol/water partition coefficient:

K_{ow} log p= -2.09 (endothall, unstated pH)

Explosive Properties:

Not Explosive

Oxidation Properties:

Not an Oxidiser

10. STABILITY AND REACTIVITY

Stability:

Chemically stable under normal conditions of storage and use.

Conditions to avoid:

Extremes of temperature.

Materials to avoid:

None known.

Hazardous Decomposition

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

Products:

Hazardous polymerization:

None known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity – Oral:

LD₅₀ (rat) 99.5 mg/kg.

Long-term dietary administration to rats produced no adverse effects.

Acute toxicity - Dermal:

LD₅₀ (rabbits) 2000 mg/kg

Acute toxicity – Inhalation:

4-hour LC₅₀ (rats) 0.83 mg/L; aerosol

Skin irritation:

Non-irritating to rabbits.

Eye irritation:

Causes irreversible eye damage in rabbits

Sensitization:

Not a skin sensitiser.

Chronic toxicity

Endothall Potassium: Although no allergic skin reactions were observed in Guinea pigs following exposure to this material in water, allergic 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 increases mortality.

Endothall: Skin allergy was observed in Guinea pigs following repeat exposure. Repeated dietary administration (via gelatin capsule) produced vomiting, diarrhea, sluggish movement, and liver and blood effects in dogs. Long-term dietary administration to rats and mice produced effects in the glandular stomach. High mortality rates and intestinal tumors considered to be secondary to the effects in the stomach were observed in mice. Long-term application to the skin of mice produced no tumors. No birth defects were observed in the offspring of rats exposed orally during pregnancy, even at dosages that produced adverse effects on the mothers. Skeletal anomalies were observed in the offspring of rabbits and mice exposed orally during pregnancy, but only at dosages that produced adverse effects on the mothers. No genetic changes were observed in tests using bacteria, animal cells or animals

12. ECOLOGICAL INFORMATION

Ecotoxicity: Endothall-potassium

EEL_{water} 0.086 ppm dipotassium endothall.

Toxicity to Aquatic species

Bluegill sunfish - LC50 316 – 501 mg/L
Rainbow Trout - LC50 107 – 528.7mg/L
Large mouth Bass - LC50 130 mg/L
Sheepshead Minnow - LC50 340 mg/L
Small mouth Bass - LC50 47 mg/L
Chinook Salmon (Juveniles) –14 day LC50 62.5 ppm
Eastern oyster - LC50 117 mg/L
Fiddler Crab - LC50 752.4 mg/L
Mysid shrimp - LC50 79 mg/L
Daphnia magna - EC50 72 hour 319 mg/L
Fresh water Blue green algae - LC50 >4.8 mg/L
Fresh water green algae - LC50 >4.8 mg/L
Fresh water diatoms - LC50 >3.6 mg/L
Marine diatoms - LC50 >9.0 mg/L

Avian Toxicity

Mallard Duck and Bobwhite Quail 8 day LC50 >5000 ppm
Mallard Duck Acute LD50 344 mg/kg

Bioaccumulation:

Does not bioaccumulate

Persistence/Degradability:

Not persistent in the environment.

Water:

Endothall-potassium is rapidly degraded in aqueous systems by the indigenous microbial population to CO₂ and other nontoxic natural products.

13. DISPOSAL CONSIDERATIONS

Methods of disposal:



Ensure that all product is used according to label instructions as the preferred option for disposal. Triple rinse empty container and add rinsate to treatment tank. Recycle container through the Agrecovery programme. Otherwise bury in landfill.

14. TRANSPORT INFORMATION - International transport regulations

UN number: 2902

Class or Division: 6.1

Subsidiary Class:

Packing Group: III

Marine Pollutant: NA

Proper shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S. (Contains endothall)

**INTERNATIONAL AIR
TRANSPORT ASSOCIATION
(IATA):**

15. REGULATORY INFORMATION

ACVM Registered Number: Not an Agricultural Compound
HSNO Approval Code: HSR000946

Requires Tracking.
Requires a Certified Handler.

16. OTHER INFORMATION

Additional information: **Original Issue Date:** 31 October 2005
Revision Date: 19 October 2021
Replaces: ES430

Disclaimer EXCLUSION OF LIABILITY: PLEASE READ

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