



Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE		

Issued Date 08-Feb-2007

Revision Date 21-Dec-2010

Revision Number: 8

1. PRODUCT AND COMPANY IDENTIFICATION

UPI
 630 Freedom Business Center
 Suite 402
 King of Prussia, PA 19406

Emergency Telephone Number
 Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
 Medical: Rocky Mountain Poison Control Center
 (866) 673-6671 (24hrs)

Company Information
 UPI

Contact Information
 Customer Service
 R&D Technical Service

Phone Number
 1-800-438-6071
 610-878-6100

Available Hrs
 8:00 am to 5:00 pm EST
 8:00 am - 5:00 pm (EST)

Product Name AQUATHOL® Super K
EPA Reg # 70506-191
Recommended Use Aquatic herbicide
Product Code 12-388

2. HAZARDS IDENTIFICATION

Emergency Overview

May be fatal if swallowed.
Harmful if absorbed through skin
Causes irreversible eye damage

DANGER!

Appearance Beige.

Physical State Granular.

Odor Odorless.

Potential Health Effects

- Inhalation
- Skin contact

Eyes

Severely irritating to the eyes.

Skin

May cause mild skin irritation.

Ingestion

May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Dipotassium endothall salt	2164-07-0	63	N/A
2-propenamide polymer with potassium	31212-13-2	28	N/A

4. FIRST AID MEASURES

Eye Contact

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

Skin Contact

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

Inhalation

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

Ingestion

Call a physician or Poison Control Center immediately
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
Never give anything by mouth to an unconscious person

Notes to Physician

No information available
Treat symptomatically

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Controls	Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems. .
Personal Protective Equipment	
Eye/face Protection	Avoid contact with eyes. Goggles.
Skin Protection	Chemical resistant gloves. Long sleeved clothing. Long pants. Socks and footwear.
Respiratory Protection	Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for 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. Respiratory protection programs must comply with 29 CFR 1910.134. . NIOSH approved half- or full-face respirator with a cartridge or canister approved for dusts and mists or a cartridge with any N, R, P, or He filter. Note: the quarter face cupstyle respirator does not meet this requirement. .

General Hygiene Considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Beige	Odor	Odorless
Physical State	Granular	pH	6.9
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	0.607 g/cm ³	Solubility	>65 g/100ml
Evaporation Rate	Not available	Vapor Pressure	Not available
Vapor Density	Not available	VOC Content	Not available
Viscosity	Not available	Molecular Weight	No data available
Bulk Density	No data available	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions
Conditions to Avoid	No information available.
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	Extreme temperatures may convert endothall product to endothall anhydride, a strong vesicant, causing blistering of eyes, mucous membranes and skin. .
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Single exposure studies indicate:
Oral- Moderately toxic to Rats (LD50 98 mg/kg)
Dermal - No more than slightly toxic to rabbits (LD50 > 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.

Component Information

Endothal-potassium 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.

Chronic Toxicity

There are no known carcinogenic chemicals in this product

Carcinogenicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

Endothall dipotassium salt ecotoxicity

Acute Contact Toxicity Honey Bee (*Apis mellifera*)

For endothall acid, mono-amine salt, and dipotassium salt:

Practically non-toxic

Acute Toxicity Avian

Mallard duck(*Anas platyrhynchos*), LD50 = 328 mg/kg

Acute Toxicity Freshwater Fish

Bluegill sunfish(*Lepomis macrochirus*),flow-thru, EC50 = 1071 ppm

Rainbow trout(*Oncorhynchus mykiss*),flow-thru,EC50 =363 ppm

Chanel catfish(*Ictalurus punctatus*), static, EC50 = >100 ppm

Acute Toxicity Freshwater Invertebrates

Waterflea(*Daphnia magna*), flow-thru 48hr, EC50 = 223 ppm

Scud(*Gammarius lacustris*),static 48hr, EC50 = 313 ppm

Acute Toxicity Estuarine/Marine Fish

Sheepshead minnow(*Cyrinodon variegates*), flow-thru 96hr,
EC50 = 340 ppm

Coho salmon(*Oncorhynchus kisutch*)static, 96hr, EC50 = >100ppm

Acute Toxicity Estuarine/Marine Invertebrates

Mysid shrimp(*Mysidopsis bahia*), flow-thru 96hr, EC50 = 257 ppm

Eastern oyster(*Crassostrea virginica*)shell deposition,
flow-thru 96hr, EC50 = 335 ppm

Chem Fate:

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

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or 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. .

Contaminated Packaging

Non refillable container. Do not reuse this container. . Clean container promptly after emptying. . (if plastic pail) Triple rinse (or equivalent). Then offer for recycling if available or puncture and dipose of in a sanitary landfill, or by incineration, or, if allowed by state and local suthorities, by burning. If burned, stay out of smoke. .

(if plastic bag) Completely empty bag into application equipment. Then offer for recycling if available or dipose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. .

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Pesticides, solid, toxic, n.o.s. (Endothall)
Hazard Class 6.1
UN-No 2588
Packing Group PG III
Reportable Quantity (RQ): 1,000 lbs (Endothall)

ICAO

UN-No 2588
Proper Shipping Name Pesticide, solid, toxic, n.o.s. (Endothall)
Hazard Class 6.1
Packing Group PG III

IATA

UN-No 2588
Proper Shipping Name Pesticide, solid, toxic, n.o.s. (Endothall)
Hazard Class 6.1
Packing Group PG III
ERG Code 6 L

IMDG/IMO

Proper Shipping Name Pesticide, solid, toxic, n.o.s. (Endothall)
Hazard Class 6.1
UN-No 2588
Packing Group PG III
EmS No. F-A, S-A

15. REGULATORY INFORMATION

International Inventories

Dipotassium endothall salt

NDSL Listed
EINECS/ELINCS Listed

2-propenamide polymer with potassium

DSL Listed
ENCS Listed
CHINA Listed

USAFederal Regulations

SARA 313

Y

Chemical Name	CAS-No	Weight %
Dipotassium endothall salt	2164-07-0	63

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	No
Acute Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

CERCLA

RCRA

Pesticide Information

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

International Regulations

Mexico - Grade Not available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

Revision Date 21-Dec-2010

Revision Summary

Update section 8 Update section 13

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End of MSDS