



COLIN CAMPBELL (CHEMICALS) PTY. LTD.

MATERIAL SAFETY DATA SHEET

Date of Issue: 1 January 2008

1) IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: CAMPBELL POACHEK TURF HERBICIDE
Other Names: None
Chemical Group: Dicarboxylic acid
Recommended Use: Herbicide for use in recreational turf.
Supplier Details: Colin Campbell (Chemicals) Pty Ltd ABN 29 000 045 590
5 Blackfriar Place
Wetherill Park NSW 2164
Telephone: (02) 9725 2544
Fax: (02) 9604 7768
Email: cccsyd@campbellchemicals.com.au
Website: www.campbellchemicals.com.au
Contact: Product Development Manager – (02) 9725 2544
Emergency Telephone Number: (02) 9725 2544 – 8am to 6pm Monday to Friday.

2) HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - DANGEROUS GOOD

Hazardous classification: Hazardous according to the criteria of the National Occupational Health & Safety Commission (NOHSC)

Risk phrases:

Safety phrases: See sections 4,5,6,7,8,10,12,13

ADG Classification

SUSDP classification: 6 (Standard for the Uniform Scheduling of Drugs & Poisons)

3) COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
Endothal-ptassium salt	2164-07-7	17.5%
Other ingredients including wetting agents and water	Non hazardous	>60%

4) FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poison Information Centre (Ph: 13 11 26) and follow the advice given. Show this Material Safety Data Sheet to the doctor.

Inhalation: If inhaled remove to fresh air and keep at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Skin Contact: Carefully remove contaminated clothing. Wash affected areas with soap and water. If irritation develops, contact a doctor or Poisons Information Centre.



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4) FIRST AID MEASURES continued

Eye contact:	Check and remove any contact lenses. Rinse eyes immediately with clean water for at least 15 minutes and seek medical aid.
Ingestion:	Have the victim sip a glass of water if able to do so. Do NOT induce vomiting. Keep patient at rest and seek medical advice. Loosen tight clothing. Do not give anything by mouth to an unconscious person.
First Aid facilities	Ensure eye wash and safety shower are available.
Medical Attention:	Measures against circulatory shock, respiratory depression and convulsion may be needed.

5) FIRE FIGHTING MEASURES

Extinguishing media	Water spray, foam, dry chemical, carbon dioxide (CO ₂)
Hazard from combustion products	None known.
Precautions for fighting fires	Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715/1716). Keep unnecessary people away. If it can be done safely remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later. Do not release contaminated water into the environment.
Hazchem Code	2X

6) ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Wear personal protective clothing and equipment as detailed in Section 8 PERSONAL PROTECTION. Keep people and animals away. Contain spill and absorb with earth, sand, clay or other absorbent material. Prevent spilled material from entering drains or watercourses. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc is unavoidable warn the local water authority.

7) HANDLING AND STORAGE

Handling	Keep out of reach of children. Will irritate eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour or spray mist. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. After each day's use wash gloves and contaminated clothing.
Storage	Store in the closed original container in a cool well ventilated area. Do not store for prolonged periods in direct sunlight. Store in a locked room away from children, animals, food, animal feed, seed and fertilisers. Protect from frost.
Flammability	Not flammable.



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8) EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Standards	No exposure standards have been assigned.	
Biological Limit Values	None allocated	
Engineering Controls	Control process conditions to avoid contact. Use in a well ventilated area only.	
Personal Protective Equipment	Eyes:	Safety goggles or face shield if exposure is possible
	Clothing:	Chemical resistant disposable overalls and PVC boots.
	Gloves:	Chemical resistant PVC or nitrile gloves
	Respiratory:	If inhalation is likely an AS/NZS 1715/1716 approved respirator should be worn.

9) PHYSICAL AND CHEMICALS PROPERTIES

Appearance:	Translucent yellow brown liquid
Odour:	Characteristic
Vapour pressure:	Negligible
Vapour density:	Not available
Boiling point:	ca. 100°C
Freezing/Melting point:	< -15°C
pH:	7.1
Solubility:	Soluble in water
Specific gravity:	1.13 at 20°C
Flash point:	Not available
Flammability (explosive) limit:	Not available
Auto ignition temperature:	Not available
Partition coefficient (octanol/water):	The product is soluble in water.

10) STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Excessive heat may convert endothal to anhydride, a strong vesicant, causing blistering of eyes, mucous membranes, and skin.
Incompatible materials :	Materials that react with water.
Hazardous decomposition products:	In a fire, excessive heat may convert endothal to anhydride, a strong vesicant, causing blistering of eyes, mucous membranes, and skin.
Hazardous reactions:	Hazardous polymerisation will not occur.



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11) TOXICOLOGICAL INFORMATION

Inhalation:	May irritate mucous membranes of nose and mouth.
Skin contact:	Harmful if absorbed through skin.
Eye contact:	Causes irreversible eye damage.
Ingestion:	May be fatal if swallowed.

ANIMAL TOXICITY DATA – PRODUCT

Acute:

Oral toxicity	LD ₅₀ rat 99.5mg/kg (moderately toxic) (endothal dipotassium) . Repeated dietary administration (via gelatin tablets) produced vomiting, diarrhoea, sluggish movements, and liver, kidney and blood effects in dogs.
Dermal toxicity:	LD ₅₀ rabbit 2000mg/kg (slightly toxic) (endothal dipotassium)
Inhalation toxicity:	LC ₅₀ rat (4 hour): 0.83mg/L (aerosol) (endothal dipotassium)
Skin irritation:	Not irritating - rabbit (endothal dipotassium)
Eye irritation:	Causes irreversible eye damage in rabbits (endothal dipotassium)
Sensitisation:	Skin allergy was observed in guinea pigs following repeated exposure.

Chronic:

Long term dietary administration to rats and mice produced effects in the glandular stomach. High mortality rates and intestinal tumours considered to be secondary to the effects in the stomach were observed in mice. Long term application to the skin of mice produced no tumours. 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 in the mothers. No genetic changes were observed in tests using bacteria, animal cells or animals.

12) ECOLOGICAL INFORMATION

Toxic to aquatic organisms and may cause adverse effects in the aquatic environment.
DO NOT contaminate streams, rivers or waterway with Ippon or the used containers.

Ecotoxicity:

Endothal dipotassium:

Fish toxicity:

LC₅₀ (96 h) bluegill sunfish (*Lepomis macrochirus*) 316-501.2mg/L

LC₅₀ (96 h) in trout (*Onchorhynchus mykiss*) 107-528.7mg/L

LC₅₀ (96 h) in largemouth bass 130mg/L

LC₅₀ (96 h) in smallmouth bass 47mg/L

LC₅₀ (96 h) in sheepshead minnow 340mg/L

Aquatic invertebrate toxicity:

Daphnia LC₅₀ (48 h) 72-319.5mg/L Eastern oysters LC₅₀ (48 h) 117mg/L

Fiddler crab LC₅₀ (48 h) 752.4mg/L Mysid shrimp LC₅₀ (48 h) 79mg/L

Freshwater diatoms LC₅₀ (48 h) >3.6mg/L Marine diatoms LC₅₀ (48 h) >9.0mg/L

Algal Toxicity:

Freshwater blue-green algae LC₅₀ (72 h) >4.8mg/L

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12) ECOLOGICAL INFORMATION *continued*

Ecotoxicity (continued):	<i>Bird toxicity:</i> 8-day LC ₅₀ bobwhite quail and mallard ducklings >5000mg/kg 21-day LD ₅₀ mallard duck 344mg/kg
Environmental fate, persistence and degradability, mobility	Endothal dipotassium is rapidly degraded in the soil and water to CO ₂ and non-toxic natural products..

13) DISPOSAL CONSIDERATIONS

Triple or preferable pressure rinse containers before disposal. Add rinsings to the mixing tank. Do not dispose of undiluted chemical on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14) TRANSPORT INFORMATION

UN Number:	2902
Proper Shipping name:	PESTICIDES, LIQUID, TOXIC, N.O.S.
Class and subsidiary risk:	6.1
Packing Group:	III
EPG:	
Hazchem code:	2X

15) REGULATORY INFORMATION

Registered under the Agricultural and Veterinary Chemicals Act 1988 (Commonwealth) Australian Pesticides and Veterinary Medicines Authority approval number: 47841

16) OTHER INFORMATION

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact this company.

END OF MSDS