



## COLIN CAMPBELL (CHEMICALS) PTY. LTD.

### MATERIAL SAFETY DATA SHEET

Date of Issue: 1 December 2016

#### 1) IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** CAMPBELL PROTAK 450 FUNGICIDE  
**Other Names:** Prochloraz  
**Chemical Group:** Azole derivative  
**CAS No.:**  
**Recommended Use:** Fungicide for recreational turf and postharvest use on fruit  
**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](mailto:cccsyd@campbellchemicals.com.au)  
**Website:** [www.campbellchemicals.com.au](http://www.campbellchemicals.com.au)  
**Contact:** Product Development Manager – (02) 9725 2544  
**Emergency Telephone Number:** 13 11 26 (Poisons Information Centre)

#### 2) HAZARDS IDENTIFICATION

##### Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Xi, Irritating. N, Dangerous to the environment. F, Flammable. Hazardous according to the criteria of SWA.

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

**SUSMP Classification:** S6

**ADG Classification:** Class 3: Flammable liquids.

**UN Number:** 1993, FLAMMABLE LIQUID, N.O.S.

<b>GHS classification:</b>	Flammable liquids :	Category 3
	Acute Toxicity Oral :	Category 4
	Acute Toxicity Dermal :	Category 4
	Skin Irritation :	Category 2
	Eye irritation:	Category 2B
	Acute Toxicity Inhalation:	Category 4
	Specific Target Organ Toxicity (resp) - Single Exposure	Category 3
	Hazardous to aquatic environment Short term/Chronic	Category 2

**GHS Signal Words:** WARNING


**Hazard Statements :** H226: Flammable liquid and vapour.  
H302: Harmful if swallowed.  
H312: Harmful in contact with skin.  
H315: Causes skin irritation.  
H320: Causes eye irritation.  
H332: Harmful if inhaled.  
H335: May cause respiratory irritation.  
H411: Toxic to aquatic life with long lasting effects.



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<b>General Precautionary Statements :</b>	P101 : If medical advice is needed, have product container or label at hand. P102 : Keep out of reach of children P103 : Read label before use.
<b>Pictograms :</b>	
<b>Precautionary statements Prevention:</b>	P102: Keep out of reach of children. P210: Keep away from heat, sparks, open flames and hot surfaces. - No smoking. P233: Keep container tightly closed. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical ventilating, lighting and other equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing fumes, mists, vapours or spray. P262: Do not get in eyes, on skin, or on clothing. P264: Wash contacted areas thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves, protective clothing and eye or face protection.
<b>Precautionary statements Response:</b>	P312: Call a POISON CENTRE or doctor if you feel unwell. P362: Take off contaminated clothing and wash before reuse. P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352: IF ON SKIN: Wash with plenty of soap and water. P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313: If skin irritation occurs: Get medical advice. P337+P313: If eye irritation persists: Get medical advice. P391: Collect spillage. P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.
<b>Storage :</b>	P405: Store locked up. P410: Protect from sunlight. P402+P404: Store in a dry place. Store in a closed container. P403+P235: Store in a well-ventilated place. Keep cool.
<b>Disposal:</b>	P501 Dispose of contents and container as specified on the registered label.



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#### 3) COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
Prochloraz	67747-09-5	450g/L
Xylene	1330-20-7	390g/L
Other non-hazardous ingredients	Non hazardous	balance

#### 4) FIRST AID MEASURES

**If poisoning occurs, move out of dangerous area 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.**

**If inhaled:** If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

**In case of skin contact:** Quickly and gently blot away excess liquid. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 10 minutes or until chemical is removed. If irritation persists, repeat flushing and obtain medical advice.

**In case of eye contact:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed, while holding the eyelid(s) open. Obtain medical advice immediately if irritation occurs.

**If swallowed:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

**First Aid facilities** Ensure eye wash and safety shower are available.

**Medical Attention:** Symptoms may be delayed. The first aid procedure should be established in consultation with a doctor responsible for industrial medicine.

#### 5) FIRE FIGHTING MEASURES

**Extinguishing media** Flammable. Water fog, foam, carbon dioxide or dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Hazard from combustion products** Fire decomposition products from this product may be toxic if inhaled. The major hazard in fires is usually inhalation of heated toxic or oxygen deficient (or both), fire gases.



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**Precautions for fighting fires**

There is a moderate risk of an explosion from this product if commercial quantities are involved in a fire. Firefighters should take care and appropriate precautions. Any explosion will likely spread the fire to surrounding materials. Water spray may be used to cool drums involved in a fire, reducing the chances of an explosion. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

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 fire residues and contaminated fire extinguishing water in accordance with local regulations. Do not release contaminated water into the environment.

**Hazchem Code**

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**6) ACCIDENTAL RELEASE MEASURES**

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. It should be fitted with a type G cartridge, suitable for agricultural chemicals.

Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Avoid using sawdust or other combustible material. Any electrical equipment should be non-sparking. Any equipment capable of building an electrostatic charge should be electrically grounded. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

**7) HANDLING AND STORAGE**

**Handling**

Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.



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**Storage** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Store in a cool, well ventilated area, and make sure that surrounding electrical devices and switches are suitable. Check containers periodically for leaks. Containers should be kept closed in order to minimise contamination and possible evaporation. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. If you keep more than 10,000kg or L of Dangerous Goods of Packaging Group III, you may be required to license the premises or notify your Dangerous Goods authority. If you have any doubts, we suggest you contact your Dangerous Goods authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

#### 8) EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Standards	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
	30	655

The ADI for Prochloraz is set at 0.01mg/kg/day. The corresponding NOEL is set at 1mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, June 2013.

Exposure standard – **Time Weighted Average (TWA)** means the average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day working week.

**Short Term Exposure Limit (STEL)** means the exposure level that may be equalled (but should not be exceeded for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL.

**Biological Limit Values** None allocated

**Engineering Controls** Control process conditions to avoid contact. Use in a well ventilated area only. If natural ventilation is inadequate, use of a fan is suggested. Ensure eye wash and safety shower are available

**Personal Protective Equipment**

Eyes:	Protective glasses or safety goggles. Eye wash bottle with pure water.
Clothing:	Impervious overalls buttoned to the neck and wrists and a washable hat.
Gloves:	Polyvinyl alcohol or nitrile-butyl-rubber gloves. Before removing gloves clean them with soap and water.
Respiratory:	If inhalation is likely an AS/NZS 1715/1716 approved respirator should be worn.



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**9) PHYSICAL AND CHEMICALS PROPERTIES**

<b>Appearance:</b>	White to off-white liquid
<b>Odour:</b>	Characteristic xylene odour..
<b>Vapour pressure:</b>	No data available.
<b>Relative vapour density:</b>	Not available
<b>Evaporation rate:</b>	No data available. No specific data. Expected to be low at 100°C
<b>Volatile component:</b>	No data available.
<b>Boiling point:</b>	No data available.
<b>Freezing/Melting point:</b>	No data available.
<b>pH:</b>	No data available.
<b>Solubility:</b>	Emulsifiable
<b>Specific gravity:</b>	No data available.
<b>Flash point:</b>	Non flammable
<b>Flammability (explosive) limit:</b>	Non flammable
<b>Auto ignition temperature:</b>	No data available.
<b>Partition coefficient (octanol/water):</b>	No data available.
<b>Viscosity:</b>	No data available
<b>Oxidising properties:</b>	No data available.

**10) STABILITY AND REACTIVITY**

<b>Chemical stability:</b>	Stable under normal conditions of use and storage.
<b>Conditions to avoid:</b>	This product should be kept in a cool place, preferably below 30°C. Keep away from sources of sparks or ignition. Handle and open containers carefully. Any electrical equipment in the area of this product should be flame proofed.
<b>Incompatible materials :</b>	Oxidising agents.
<b>Hazardous decomposition products:</b>	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Hydrogen chloride gas, other compounds of chlorine. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. quickly.
<b>Hazardous reactions:</b>	Does not polymerise.



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**10) TOXICOLOGICAL INFORMATION**

**Major Health Hazards:** No carcinogenic effect was observed in rats. In the study in mice, an increased incidence of liver adenomas and carcinomas was found in both males and females at concentrations above 325 ppm.

A comprehensive range of studies of genotoxicity gave consistently negative results, except for a weakly positive response in a test for sister chromatid exchange in Chinese hamster ovary cells in vitro in both the presence and the absence of an exogenous metabolic activation system.

In a two-generation study of reproductive toxicity in rats, reproductive performance was affected only at a concentration harmful to the mother.

**Inhalation**

**Short term exposure:** Significant inhalation exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available.

**Long Term exposure:** No data for health effects associated with long term inhalation.

**Skin Contact:**

**Short term exposure:** Available data indicates that this product is not harmful. It should present no hazards in normal use. However product is believed to be irritating, but is unlikely to cause anything more than mild transient discomfort.

**Long Term exposure:** No data for health effects associated with long term skin exposure.

**Eye Contact:**

**Short term exposure:** Exposure via eyes is considered to be unlikely. This product is believed to be mildly irritating, to eyes, but is unlikely to cause anything more than mild transient discomfort.

**Long Term exposure:** No data for health effects associated with long term eye exposure.

**Ingestion:**

**Short term exposure:** Significant oral exposure is considered to be unlikely. Available data shows that this product is harmful, but symptoms are not available. This product is unlikely to cause any irritation problems in the short or long term.

**Long Term exposure:** No data for health effects associated with long term ingestion.

**Carcinogen Status:**

**SWA:** No significant ingredient is classified as carcinogenic by SWA.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** Xylene is Class 3 - unclassifiable as to carcinogenicity to humans. See the IARC website for further details. A web address has not been provided as addresses frequently change

**11) ECOLOGICAL INFORMATION**

Dangerous to fish and aquatic organisms. Low toxicity to birds, bees and earthworms. DO NOT contaminate streams, rivers or waterway with this product or the used containers.

**Ecotoxicity: Prochloraz:**

Fish toxicity: LC<sub>50</sub> *Lepomis macrochirus* (bluegill sunfish) : 2.2mg/L

LC<sub>50</sub> rainbow trout) : 1.5mg/L

Invertebrates : LC<sub>50</sub> (48-hr) (*Daphnia*) : 4.3mg/L

EC<sub>50</sub> (72-hr) for shrimp 0.77mg/L

EC<sub>50</sub> (72-hr) for oyster 0.95mg/L

Algae: EC<sub>50</sub> (72-hr) for *Selenastrum capricornutum* 0.01mg/L

Birds : LD<sub>50</sub> bobwhite quail : 662mg/kg

LD<sub>50</sub> mallard duck : >1954mg/kg

Bees : Not toxic.



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**Environmental fate, persistence and degradability, mobility**      Partition coefficient n-octanol/water : log P<sub>ow</sub> 4.38.  
Prochloraz is well adsorbed onto soil particles, and is immobile in soil, not readily degradable and not readily leached. It is degraded by biological activity and sunlight.

**Identified harmful effects on environment:**      Highly toxic to fish and aquatic invertebrate.

**Other precautions:**      Do not contaminate dams, waterways or sewers with this product.

#### 12) DISPOSAL CONSIDERATIONS

This product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used containers. 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.

#### 13) TRANSPORT INFORMATION

**Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.**

##### ADG

**UN No.:** 1993  
**Proper shipping name:** FLAMMABLE LIQUID,N.O.S.  
**Class:** 3  
**Packing group:** III  
**Special provisions:** 223, 274  
**Packing instruction :** P001, IBC03, LP01  
**Hazchem Code :** •3Y

##### IMDG/IMSBC

**UN No.:** 1993  
**IMO Proper shipping name:** FLAMMABLE LIQUID,N.O.S. (contains xylene)  
**IMO Class:** 3  
  
**Packing group:** III  
**IMO Marine Pollutant:** Not a Marine Pollutant





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**14) REGULATORY INFORMATION**

Registered under the Agricultural and Veterinary Chemicals Act 1988 (Commonwealth) Australian Pesticides and Veterinary Medicines Authority approval number: 45187

**15) OTHER INFORMATION**

Date of revision : 1 December 2016  
Reason for revision : Upgrading to GHS format.

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.

**END OF MSDS**