COLIN CAMPBELL (CHEMICALS) PTY. LTD.

SAFETY DATA SHEET

Date of Issue: 1 December 2016

1) IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:	**CAMPBELL CHEERS 500SC FLOWABLE FUNGICIDE**
Other Names:	Chlorothalonil (ISO), tetrachloroisophthalonitrile (IUPAC)
Chemical Group:	Dicarboximide
CAS No.:	
Recommended Use:	Fungicide for use on horticultural crops.
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

GHS classification:

Reproductive toxicity :	Category 2
Carcinogenicity :	Category 2
Serious eye damage / eye irritation :	Category 1
Hazardous to the environment (acute) :	Category 1
Hazardous to the environment :	Category 1

Signal Words: Poison

Hazard Statements :

H351 Suspected of causing cancer
H318 Causes serious eye damage
H361 Suspected of damaging fertility or the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

General Precautionary Statements :

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.

Pictograms :

Precautionary statements Prevention:	P201 Obtain special instruction before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P273 Avoid release to the environment if this is not the intended use. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements Response:	P308 + P313 IF exposed or concerned: Get medical advice/attention. P305 + P351 +P338 IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISONS CENTRE /doctor. P391 Collect spillage.
Storage :	P405 Store locked up.
Disposal:	P501 Dispose of contents/container to an approved waste disposal plant.
Other information :	Non-dangerous goods. Hazardous substance. Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

3) COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration
Chlorothalonil	1897-45-6	30-60%
Other ingredients including wetting agents and water	Non hazardous	30-60%

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 Safety Data Sheet to the doctor.

If inhaled:	Move to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a doctor.
In case of skin contact:	Carefully remove contaminated clothing and shoes immediately. Wash affected areas with mild soap and plenty of water. If skin redness or rash occurs, get medical attention. Wash contaminated clothing before reuse.
In case of eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISONS CENTRE /doctor. .

If swallowed:	Rinse mouth. DO NOT induce vomiting. 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	Water, carbon dioxide, foam or dry chemical.
Hazard from combustion products	In a fire, formation of carbon monoxide, carbon dioxide and nitrogen oxides can be expected.
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 fire residues and contaminated fire extinguishing water in accordance with local regulations. 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. Ensure adequate ventilation. 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. Avoid contact with eyes and skin. Do not inhale 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 out of sunlight. Store in a locked room away from children, animals, food, animal feed, seed and fertilisers. Protect from frost.

8) EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Standards

No exposure standards have been assigned.

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.

Biological Limit Values

None allocated

Engineering Controls

Control process conditions to avoid contact. Use in a well ventilated area only. Facilities storing or utilising this material should be equipped with an eyewash facility and safety shower.

Personal Protective Equipment

Eyes:	Safety goggles.
Clothing:	Cotton 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.

9) PHYSICAL AND CHEMICALS PROPERTIES

Appearance:	Light grey viscous liquid
Odour:	Slightly pungent.
Vapour pressure:	Not available
Relative vapour density:	Not available
Evaporation rate:	Not determined.
Boiling point:	>100^{O}C
Freezing/Melting point:	No data available.
pH:	9.0
Solubility:	Disperses in water
Specific gravity:	1.35 (25^{O}C)
Flash point:	No data available.
Flammability (explosive) limit:	Not available
Auto ignition temperature:	No data available.
Partition coefficient (octanol/water):	Chlorothalonil : log P_{ow} = 2.92 at 25^{O}C
Viscosity:	No data available
Oxidising properties:	No data available.

10) STABILITY AND REACTIVITY

Chemical stability:	Stable against heat, acid, alkali, and sunlight under normal conditions of use and storage.
Conditions to avoid:	Excessive heat
Incompatible materials :	None known.
Hazardous decomposition products:	In a fire, formation of carbon monoxide, carbon dioxide, hydrochloric acid and nitrogen oxides can be expected.
Hazardous reactions:	Stable under recommended storage conditions. No decomposition if used as directed.

10) TOXICOLOGICAL INFORMATION

Inhalation:	No data available
Skin contact:	Irritating (rabbit) (Not classified).
Eye contact:	Irritating (No irritation was noted during the study of the 750-fold diluted aqueous solution, rabbit) (Category1)
Ingestion:	No data.
Chronic toxicity: **Germ cell mutagenicity:**	No sufficient data available
Carcinogenicity:	2B by IARC and Japan Society for Occupational health (Mutagenicity Negative. Showed threshold value). Category 2
Toxic to reproduction:	In the rat teratology study, a slight increase, not statistically different, in the number of early embryonic deaths was associated with the maternal toxicity at the high dose (category 2)
Specific target organ toxicity (repeated exposure):	No sufficient data available
Acute toxicity: **Oral toxicity:**	LD_{50} rat-male > 2,500 mg/kg
Dermal toxicity :	LD_{50} rat-male and female >2,000mg/kg
Inhalation toxicity:	No data
Sensitisation:	Negative (guinea pig)
Respiratory sensitisation	No data available
Specific target organ toxicity (single exposure:	No sufficient data available

11) ECOLOGICAL INFORMATION

Very toxic to aquatic organisms and may cause adverse effects in the aquatic environment.
DO NOT contaminate streams, rivers or waterway with this product or the used containers.

Ecotoxicity: **Chlorothalonil:**
Fish toxicity: LC-50 (96 h)(carp) 0.11 mg/L.
Daphnia toxicity: LC-50 (48 h) 0.35 mg/L
Algae toxicity : EbC_{50} (0-72h) 0.22mg/L
NOECb 0.10 mg/L

Environmental fate, persistence and degradability, mobility No data available.

Identified harmful effects on environment: This product is a marine pollutant for sea transport. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

International regulation

UNRTDG

UN Number :	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (chlorothalonil)
Class and subsidiary risk:	9
Packing Group:	III
Labels	9

IATA-DGR

UN/ID No.:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Environmentally hazardous substance, liquid,n.o.s. (chlorothalonil)
Class:	9
Packing group:	III
Labels:	Miscellaneous
Packing instruction (cargo aircraft):	964
Packing instruction (passenger aircraft):	964

IMDG-Code

UN number:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (chlorothalonil)
Class:	9
Packing group:	III
Labels:	9
EmS Code:	F-A,S-F
Marine pollutant:	Yes

ADG

UN number:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (chlorothalonil)
Class:	9
Packing group:	III
Labels:	9
Hazchem code:	2X
Remarks:	SP No. AU01 Environmentally Hazardous Substances meeting the descriptions of UN3077 or UN3082 are not subject to this code when transported by road or rail in: (a) Packagings that do not incorporate a receptacle exceeding 500kg(L); or (b) (b) IBCs.

14) REGULATORY INFORMATION

Registered under the Agricultural and Veterinary Chemicals Act 1988 (Commonwealth) Australian Pesticides and Veterinary Medicines Authority approval number: 66132

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 SDS