

# msds

## MATERIAL SAFETY DATA SHEET

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### SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT (MATERIAL) NAME	<b>FOCUS POWERCIDE 4</b>		
OTHER NAMES			
RECOMMENDED USE	Swimming pool algacide for black, green, yellow & other algae. Use in conjunction with chlorination.		
SUPPLIER NAME/ADDRESS	Focus Products Pty Ltd 35 Moreton Street Heathwood Qld 4110 PO Box131 Carole Park QLD 4300		
TELEPHONE NO.	1800 42 55 66		
EMERGENCY PHONE NUMBER	0411 623 619 (A/H)	Hours: 0800-1700	Monday-Friday

### SECTION 2 HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION	Classified as hazardous according to criteria of SAFework Australia. Not classified as dangerous according to criteria of ADG Code. Xi Irritant: N-Environmental hazard.
RISK PHRASE(S)	R 36/37/38 Irritating to eyes, respiratory system and skin. R22: Harmful if swallowed. R52 Harmful to aquatic organisms.
SAFETY PHRASE(S)	S 2 Keep out of reach of children. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S20: When using, do not eat or drink. S24: Avoid contact with skin. S29: Do not empty into drains. S45: In case of accident or if you feel unwell, contact a doctor or Poisons Information Centre 131126 immediately (show the label where possible). S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURE		
Chemical identity of ingredients	Proportion of ingredients	CAS Number(s) for ingredients
Copper sulphate	<15%	[7758-98-7]
Quaternary ammonium compounds	10%	[139-07-11]
Formulation consists of other ingredients determined not to be hazardous or are below their cut-off values.		

### SECTION 4 FIRST AID MEASURES

Swallowed:	For advice, contact a Poisons Information Centre (Phone Australia 131126; New Zealand 0800 764 766) or a doctor .
Eye:	If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair

Inhalation: with running water.  
If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Medical attention or special treatment required

**ADVICE TO DOCTOR.** Treat symptomatically for exposure to benzalkonium chloride

## SECTION 5 FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Foam, Carbon Dioxide, Dry Chemical Powder, and Water fog.
HAZARDS FROM COMBUSTION PRODUCTS	Combustion will release toxic gasses. Carbon dioxide, carbon monoxide, (CO <sub>x</sub> ) nitrous oxide (NO <sub>x</sub> ) and hydrogen chloride vapours.
SPECIAL PROTECTIVE PRECAUTIONS AND EQUIPMENT FOR FIRE FIGHTERS	Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of decomposition (CO <sub>x</sub> ), NO <sub>x</sub> Cu fume evolved.
Additional information	Not considered flammable
Hazchem Code	Not Applicable

## SECTION 6 ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES	Extinguish any source of flame Evacuate area, clearing all unnecessary personnel. Contain liquid with soil/sand. Prevent liquid from entering storm water drains, basements or workpits. Wear protective goggles to prevent eye contamination. Absorb spill with soil/sand and recover material into plastic heavy duty drums. Label drums correctly.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP	Refer to State Land Waste Management Authority. Empty containers must be decontaminated. Normally suitable for disposal at approved land waste site.

## SECTION 7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	Wear protective goggles and rubber gloves to prevent eye and skin contamination.
CONDITIONS FOR SAFE STORAGE	Keep containers tightly sealed when not in use. Store in a well-ventilated place and out of direct sunlight. Check area regularly for spills.
INCOMPATIBILITIES	Not to be loaded with dangerous when wet substances (Class 4.3), oxidising agents (Class 5), cyanides (Class 6), strong acids (Class 8) or foodstuffs.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS	Not determined for this product.
BIOLOGICAL LIMIT VALUES	
ENGINEERING CONTROLS	Avoid breathing vapour and inhaling mists or aerosols. Do not store in brass, copper or white metal alloy containers for extended periods.
<b><u>PERSONAL PROTECTION:</u></b>	Avoid unnecessary contact as good work practice. Wash contaminated clothing and protective equipment before storing and re-use. Wash hands before eating, smoking or using the toilet.
<b><u>RESPIRATORY PROTECTION</u></b>	It is usually safe to not use respiratory protection. However, there may be circumstances where use of a mask or other device is appropriate. Use judgement. For assistance in selecting suitable equipment consult AS/NZ1715.
<b><u>EYE PROTECTION</u></b>	Eye protective measures are normally necessary, and are suggested when using this product. Consult AS1336 and AS/NZ1337
<b><u>PROTECTIVE GLOVES</u></b>	Rubber, PVC or other protective gloves are necessary, and desirable, especially if product is being used frequently or for lengthy periods. Consult AS2161 for guidance.
<b><u>CLOTHING</u></b>	Clean overalls should be worn, preferably with an apron. Consult AS2919 for clothing guidance.
<b><u>SAFETY FOOTWEAR</u></b>	Wearing safety boots is advisory. Consult AS/NZ 2210 for advice on Occupational Protective Footwear.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b><u>Appearance:</u></b>	Dark-ink blue, foaming liquid.
<b><u>Flammability:</u></b>	product is not flammable.
<b><u>Melting Point:</u></b>	0 °C
<b><u>Boiling Point:</u></b>	100 °C
<b><u>Flash Point:</u></b>	none

Vapour Pressure:	unknown
Volatiles:	69%
Vapour Density	unknown
Flammability Limits	NA
Specific Gravity:	1.3-1.35
pH product	10-10.5
Solubility in water	infinitely dilutable with water

## SECTION 10 STABILITY AND REACTIVITY

Chemical stability	Stable
Conditions to avoid	Do not mix with oxidising agents (Class 5)
Incompatible materials	Substances (Class 4.3), oxidising agents (Class 5), cyanides (Class 6), strong acids (Class 8) or foodstuffs.
Hazardous decomposition products	Toxic gases including oxides of carbon (CO <sub>x</sub> nitrous oxide (NO <sub>x</sub> ) and hydrogen chloride and copper vapours.)
Hazardous reactions	Oxidising agents (Class 5)

## SECTION 11 TOXICOLOGICAL INFORMATION

Quaternary ammonium compounds	Acute Oral Toxicity LD <sub>50</sub> (rat) 190-220mg/kg
Cupric Sulphate	Acute Oral Toxicity LD <sub>50</sub> (rats) 300mg/kg.
<b>SYMPTOMS OF EXPOSURE</b>	
Swallowed:	Will have metallic taste. May cause nausea and vomiting. May cause tissue damage to mouth and gullet.
Eye:	Will be irritant, causing tearing and redness. May cause permanent injury and impairment of vision.
Skin:	May be irritant with sensitive individuals or after repeated contact. Prolonged or repeated exposure may lead to dermatitis. No specific data available on skin adsorption.
Inhalation:	Not normally considered an inhalation hazard. Aspiration (breathing in) of liquid, spray mist. May cause irritation to respiratory tract.
<b>ACUTE DELAYED</b>	
<i>Aggravated medical conditions caused by exposure</i>	

## SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY	Toxic to aquatic species, due to copper content. Avoid contaminating waterways. 96 hr LC50 (Rainbow trout, Harlequin fish, goldfish, eel): 0.5-12.5 mg/l 48 hr LC50 (Daphnia Magna): 120 ug/l
PERSISTENCE AND DEGRADABILITY	Do not dump large quantities into biological treatment ponds. Laboratory data indicates that if quaternary ammonium compounds are discharged steadily at low concentrations (< 15 mg/litre), it may be expected that these salts can be degraded in sewage treatment plants by acclimatized organisms. However consideration should be given to the Copper content which may change the dilution factors.
MOBILITY	
ENVIRONMENTAL FATE (EXPOSURE)	
BIOACCUMULATIVE POTENTIAL	Copper salts will bioaccumulate, however quaternary ammonium compound will biodegrade upon adequate dilution

## SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS AND CONTAINERS	Refer to State Land Waste Management Authority. Empty containers must be decontaminated. Normally suitable for disposal at approved land waste site.
SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION	

## SECTION 14 TRANSPORT INFORMATION

UN NUMBER	Not applicable
UN PROPER SHIPPING NAME	Not applicable

CLASS AND SUBSIDIARY RISK	Not applicable
PACKING GROUP	Not applicable
SPECIAL PRECAUTIONS FOR USER	Not applicable
HAZCHEM CODE	Not applicable

## SECTION 15 REGULATORY INFORMATION

Poison Schedule	5
OHS	Considered a hazard
Environmental	Considered a hazard

*Additional information*

*Additional national and/or international regulatory information.*

## SECTION 16 OTHER INFORMATION

Date of preparation or last revision of the MSDS	06 September 2012
<i>Prepared by</i>	Glenn Bowring B App Sc (App Chem)

*Additional information*

*Key/legend to abbreviations and acronyms used in the MSDS.*

<b>ADG</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail
<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>ASCC</b>	Australian Safety and Compensation Council
<b>Code AICS</b>	Australian Inventory of Chemical Substances
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>EPG</b>	Emergency Procedure Guide ( superseded by IERG)
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>IATA</b>	International Air Transport Association
<b>IERG</b>	HB 76-2004 Dangerous goods - Initial Emergency Response Guide
<b>LEL</b>	lower flammable (explosive) limits in air;
<b>LD<sub>50</sub></b>	Lethal Dose sufficient to kill 50% of test population
<b>NIOSH</b>	National Institute for Occupational Safety and Health The United States federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness.
<b>NOAEL</b>	No Observed Adverse Effect Level
<b>NOEL</b>	No Observable Effect Level
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>NTP</b>	National Toxicology Program (USA)
<b>PEL</b>	Permissible Exposure Limit
<b>RTECS</b>	Registry of Toxic Effects of Chemical Substances (Symyx Technologies)
<b>TCL<sub>o</sub></b>	Toxic Concentration Low
<b>TD<sub>Lo</sub></b>	Toxic Dose Low : lowest dosage per unit of bodyweight (typically stated in milligrams per kilogram) of a substance known to have produced signs of toxicity in a particular animal species.
<b>TLV</b>	Threshold Limit Value (ACGIH):The time weighted average used to describe exposure which is harmless to most of the population when exposed 8 hours per day, 40 hours per week.
<b>TWA</b>	(Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
<b>SAFEWORK</b>	Independent statutory agency with primary responsibility to improve occupational health and safety and workers' compensation arrangements across Australia.
<b>STEL</b>	(Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UEL</b>	upper flammable (explosive) limits in air;
<b>UN Number</b>	United Nations Number
<i>Literature references.</i>	
<i>Sources for data.</i>	Material Safety Data Sheets from Suppliers Hazardous Substances Information System (HSIS)– ASCC Australia (on-line) ESIS (European Chemical Substance Information System) ADG Code 7 <sup>th</sup> Edition SUSMP N°3

## DISCLAIMER:

This MSDS summarizes 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 how the product will be handled and used in the workplace including its use 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 Focus Products. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. Focus Products however makes no warranty whatsoever, expressed, implied or of merchantability regarding the accuracy of such data or the results to be obtained from the use thereof and assumes no responsibility for injury to buyer or third persons or for any damage to property. Buyer assumes all risks.