

Chemwatch: 24-9194 Version No: 2.1.1.1 Safety Data Sheet according to WHS and ADG requirements Chemwatch Hazard Alert Code: 3

Issue Date: 27/06/2017 Print Date: 05/03/2018 S.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Toilet Bowl Cleaner
Synonyms	Not Available
Other means of identification	Not Available
Relevant identified uses of the substance or mixture and uses advised against	

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Cleaner/sanitiser for toilet bowls and urinals.

Details of the supplier of the safety data sheet

Registered company name	Chemeco (Aust)
Address	17 Yale Drive Epping VIC 3076
Telephone	+61 3 9408 8699
Fax	+61 3 9408 8399
Website	www.chemeco.com.au
Email	info@chemeco.com.au

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	Not Available
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable	
Classification [1]	Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 3	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	
Label elements		
GHS label elements SIGNAL WORD	DANGER	
Hazard statement(s)		
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H412	Harmful to aquatic life with long lasting effects.	
Precautionary statement(s) F	Prevention	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P273	Avoid release to the environment.	

Precautionary statement(s) Response

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 POISON CENTER or doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7664-38-2	<10	phosphoric acid
9016-45-9	<10	nonylphenol, ethoxylated
Not Available	<10	quaternary ammonium compound
Not Available	<1	perfume
Not Available	<1	dye
7732-18-5	>60	water

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.		
Advice for firefighters			
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. 		

Fire/Explosion Hazard	 Non combustible. Not considered to be a significant fire risk. Expansion or decomposition on heating may lead to violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). Decomposition may produce toxic fumes of:, carbon dioxide (CO2), phosphorus oxides (POx), nitrogen oxides (NOx)
-----------------------	--

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite.
Major Spills	 Minor hazard. Clear area of personnel. Alert Fire Brigade and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment as required.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 DO NOT allow clothing wet with material to stay in contact with skin Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with incompatible materials.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.
Conditions for safe storage, including any incompatibilities	

Suitable	container	 Lined metal can, lined metal pail/ can. Plastic pail. Polyliner drum. Packing as recommended by manufacturer.
Storage incor	mpatibility	 Reacts vigorously with alkalis Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA								
Source	Ingredient	Material name	TWA	ST	TEL	Peak		Notes
Australia Exposure Standards	phosphoric acid	Phosphoric acid	1 mg/m3	3 r	mg/m3	Not A	vailable	Not Available
EMERGENCY LIMITS								
Ingredient	Material name				TEEL-1		TEEL-2	TEEL-3
phosphoric acid	Phosphoric acid				Not Available		Not Available	Not Available
nonylphenol, ethoxylated	Glycols, polyethylene, mono(p-nonylphenyl) ether; (Nonoxynol-9)			9.9 mg/m3		110 mg/m3	300 mg/m3	
nonylphenol, ethoxylated	Ethoxylated nonylphenol; (Nonyl phenyl polyethylene glycol ether)			0.37 mg/m3 4.		4.1 mg/m3	260 mg/m3	
Ingredient	Original IDLH			Revise	ed IDLH			
phosphoric acid	10,000 mg/m3		1,000 mg/m3					
nonylphenol, ethoxylated	Not Available		Not Available					
quaternary ammonium compound	Not Available		Not Available					
perfume	Not Available	Not Available		Not Available				
dye	Not Available	Not Available		Not Available				
water	Not Available			Not Av	ailable			

.

Chemeco Toilet Bowl Cleaner

Exposure controls	
Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Personal protection	
Eye and face protection	 Safety glasses with side shields; or as required, Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	 Overalls. P.V.C. apron. Barrier cream.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the: "Forsberg Clothing Performance Index". The effect(s) of the following substance(s) are taken into account in the

computer-generated selection: NV Chemicals Toilet Bowl Cleaner

Material	CPI
NEOPRENE	A
NATURAL RUBBER	С

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove,

a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Respiratory protection

Type AB-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AB-AUS P2	-	AB-PAPR-AUS / Class 1 P2
up to 50 x ES	-	AB-AUS / Class 1 P2	-
up to 100 x ES	-	AB-2 P2	AB-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Information on basic physical and chemical properties

Appearance	Blue, viscous acidic liquid; mixes with water.		
Physical state	Liquid	Relative density (Water = 1)	1.05
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	1.0	Decomposition temperature	Not Available
Melting point / freezing point (°C)	10	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available

Solubility in water (g/L)	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	vapours, fumes or aerosols, especially for prolonged period	n (as classified by EC Directives using animal models). Nevertheless inhalation of ods, may produce respiratory discomfort and occasionally, distress. od by the material during the course of normal handling, may be damaging to the	
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. Ingestion may result in nausea, abdominal irritation, pain and vomiting		
Skin Contact	This material can cause inflammation of the skin on conta The material may accentuate any pre-existing dermatitis of Open cuts, abraded or irritated skin should not be expose Entry into the blood-stream, through, for example, cuts, al prior to the use of the material and ensure that any extern	condition d to this material brasions or lesions, may produce systemic injury with harmful effects. Examine the skir	
Eye	If applied to the eyes, this material causes severe eye dat	nage.	
Chronic	Prolonged or repeated skin contact may cause drying with	n cracking, irritation and possible dermatitis following.	
NV Chemicals Toilet Bowl	ΤΟΧΙΟΙΤΥ	IRRITATION	
Cleaner	Not Available	Not Available	
	тохісіту	IRRITATION	
	Dermal (rabbit) LD50: >1260 mg/kg	[Monsanto]*	
phosphoric acid	Inhalation (rat) LC50: 0.0255 mg/L/4hr ^[2]	Eye (rabbit): 119 mg - SEVERE	
	Oral (rat) LD50: 1.7 ml ^[1]	Skin (rabbit):595 mg/24h - SEVERE	
	тохісіту	IRRITATION	
new-dubered ethew-deted	Dermal (rabbit) LD50: 2080 mg/kg ^[2]	Eye (rabbit): 5 mg SEVERE	
nonylphenol, ethoxylated	[2] Oral (rat) LD50: 1310 mg/kg	Skin (human): 15 mg/3D mild	
		Skin (rabbit): 500 mg mild	
	тохісіту	IRRITATION	
water	Oral (rat) LD50: >90000 mg/kg ^[2]	Not Available	
Legend:	1. Value obtained from Europe ECHA Registered Substar specified data extracted from RTECS - Register of Toxic	nces - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise Effect of chemical Substances	
PHOSPHORIC ACID	respiratory tract have not been examined in this respect. Mucc just as mucous plays an important role in protecting the gastric genotoxic events in vivo in the respiratory system, comparison or nocturnal conditions, and with the human urinary bladder, in	karyotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the bus secretion may protect the cells of the airways from direct exposure to inhaled acidic mists, epithelium from its auto-secreted hydrochloric acid. In considering whether pH itself induces should be made with the human stomach, in which gastric juice may be at pH 1-2 under fasti which the pH of urine can range from <5 to > 7 and normally averages 6.2. ged or repeated exposure and may produce on contact skin redness, swelling, the Repeated exposures may produce severe ulceration.	

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. phosphoric acid (85%)

NONYLPHENOL, ETHOXYLATED	Human beings have regular contact with alcohol ethoxylates thro and other cleaning products . Exposure to these chemicals can ca acute toxicity show that volumes well above a reasonable intake case of poisoning with alcohol ethoxylates has ever been reporte Both laboratory and animal testing has shown that there is no ev cancer. No adverse reproductive or developmental effects were The material may cause skin irritation after prolonged or repeate production of vesicles, scaling and thickening of the skin.	uccur through ingestion, ir level would have to occur ad. idence for alcohol ethoxy observed.	halation, or contact with the skin or eyes. Studies of to produce any toxic response. Moreover, no fatal lates (AEs) causing genetic damage, mutations or
PHOSPHORIC ACID & WATER	No significant acute toxicological data identified in literature search.		
PHOSPHORIC ACID & NONYLPHENOL, ETHOXYLATED	The material may produce severe irritation to the eye causing pr may produce conjunctivitis.	onounced inflammation. F	Repeated or prolonged exposure to irritants
Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	✓	Reproductivity	0
Serious Eye Damage/Irritation	✓ s	TOT - Single Exposure	0
Respiratory or Skin sensitisation	S STO	T - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0
		Legena.	 Data available but does not fill the criteria for classification Data required to make classification available

S - Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
phosphoric acid	LC50	96	Fish	75.1mg/L	2
phosphoric acid	EC50	48	Crustacea	>100mg/L	2
phosphoric acid	EC50	72	Algae or other aquatic plants	>100mg/L	2
phosphoric acid	EC50	72	Algae or other aquatic plants	77.9mg/L	2
phosphoric acid	NOEC	72	Algae or other aquatic plants	<7.5mg/L	2
nonylphenol, ethoxylated	EC50	120	Crustacea	0.15mg/L	4
nonylphenol, ethoxylated	EC50	48	Crustacea	12.2mg/L	4
nonylphenol, ethoxylated	EC50	96	Algae or other aquatic plants	12.0mg/L	4
nonylphenol, ethoxylated	LC50	96	Fish	1.3mg/L	4
nonylphenol, ethoxylated	NOEC	2400	Fish	0.035mg/L	4
water	EC50	384	Crustacea	199.179mg/L	3
water	EC50	96	Algae or other aquatic plants	8768.874mg/L	3
water	LC50	96	Fish	897.520mg/L	3

Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
phosphoric acid	HIGH	HIGH
nonylphenol, ethoxylated	LOW	LOW
water	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
phosphoric acid	LOW (LogKOW = -0.7699)
nonylphenol, ethoxylated	LOW (BCF = 16)
water	LOW (LogKOW = -1.38)

Mobility in soil

Ingredient	Mobility
phosphoric acid	HIGH (KOC = 1)
nonylphenol, ethoxylated	LOW (KOC = 940)
water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

SECTION 14 TRANSPORT INFORMATION

Labels Required

-	
Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

PHOSPHORIC ACID(7664-38-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Hazardous Substances Information System - Consolidated Lists

NONYLPHENOL, ETHOXYLATED(9016-45-9) IS FOUND ON THE FOLLOWING REGULATORY

LISTS Australia Inventory of Chemical Substances (AICS)

WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (phosphoric acid; water)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (water)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory $N = Not$ determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
phosphoric acid	7664-38-2, 16271-20-8
nonylphenol, ethoxylated	9016-45-9, 26027-38-3, 26571-11-9, 14409-72-4

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at: www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

Australia Inventory of Chemical Substances (AICS)

PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangeroy Exposure Elline. IDLH: Immediately Dangeroy to Life or Health Concentrations OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors

BEI: Biological Exposure Index