Unimig Unicool

Welding Guns of Australia

Chemwatch: 15-5713 Version No: 2.1.1.1 Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 1

Issue Date: 01/01/2013 Print Date: 21/09/2015 Initial Date: Not Available L.GHS.AUS.EN

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

Product Identifier

Synonyms Not Available Other means of Not Available	Product name	Unimig Unicool
Other means of Not Available	Synonyms	Not Available
identification	Other means of identification	Not Available

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

Relevant identified uses Welding system coolant.

Details of the supplier of the safety data sheet

Registered company name	Welding Guns of Australia
Address	112 Christina Road, Villawood 2163 NSW Australia
Telephone	02 9780 4200
Fax	Not Available
Website	Not Available
Email	Not Available

Emergency telephone number

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

CHEMWATCH EMERGENCY RESPONSE

Primary Number	Alternative Number 1	Alternative Number 2
1800 039 008	+612 9186 1132	Not Available

Once connected and if the message is not in your prefered language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	0	1	
Toxicity	1		0 = Minimum
Body Contact	1		1 = Low 2 = Moderate
Reactivity	0		3 = High
Chronic	0	1	4 = Extreme

Poisons Schedule	Not Applicable
GHS Classification	Not Applicable

Label elements

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ABLE

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Precautionary statement(s) Response

Precautionary statement(s) Storage

Precautionary statement(s) Disposal

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
57-55-6	30-60	propylene glycol
7732-18-5	30-60	water

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. 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. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/Explosion Hazard	 The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). May emit acrid smoke.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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. Wipe up. Place in a suitable, labelled container for waste disposal.
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. Prevent spillage from entering drains or water ways. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal. Wash area and prevent runoff into drains or waterways. If contamination of drains or waterways occurs, advise emergency services.
	Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for 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.
	When handling, DO NOT eat, drink or smoke.
Safe handling	Keep containers securely sealed when not in use.
-	Avoid physical damage to containers.
	Always wash hands with soap and water after handling.
	Work clothes should be laundered separately.
	Use good occupational work practice.
	Observe manufacturer's storage and handling recommendations contained within this MSDS.
	Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
	► Store in original containers.
	Keep containers securely sealed.
	Store in a cool, dry, well-ventilated area.
Other information	Store away from incompatible materials and foodstuff containers.
	Fortect containers against physical damage and check regularly for leaks.
	 Protect containers against physical damage and check regulary to reaks. Observe manufacturer's storage and handling recommendations contained within this MSDS.
	Observe manufacturer s storage and nandming recommendations contained Will III UIS MSDS.

Conditions for safe storage, including any incompatibilities

Suitable container	 DO NOT use aluminium or galvanised containers Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	None known

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	propylene	Propane-1,2-diol total: (vapour & particulates) / Propane-	474 mg/m3 / 10 mg/m3 /	Not	Not	Not
	glycol	1,2-diol: particulates only	150 ppm	Available	Available	Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL	1	TEEL-2	TEEL-3
propylene glycol	Propylene glycol; (1,2-Propanediol)	30 mg/m3		1300 mg/m3	7900 mg/m3
Ingredient	Original IDLH		Revised IDLH		
propylene glycol	Not Available		Not Available		
water	Not Available Not Available				

MATERIAL DATA

Exposure controls

Appropriate 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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Employers may need to use multiple types of controls to prevent employee overexposure.

General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air)	0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)

Within each range the appropriate value depends on:

Lower end of the range	Upper end of the range	
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	
2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity	
3: Intermittent, low production.	3: High production, heavy use	
4: Large hood or large air mass in motion	4: Small hood - local control only	

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.



Safety glasses with side shields.

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. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

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. ▶ Eyewash unit.
Thermal hazards	Not Available

Recommended material(s)

Personal protection

Eye and face protection

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:

Unimig Unicool

Material	CPI
BUTYL	С
NATURAL RUBBER	С
NEOPRENE	С
PE/EVAL/PE	С
PVA	С
VITON	С

Respiratory protection

Type A-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	Half-Face	Full-Face	Powered Air	

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	A-AUS / Class 1 P2	-	A-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	A-2 P2	A-PAPR-2 P2
up to 50 x ES	-	A-3 P2	-
50+ x ES	-	Air-line**	-

* - Continuous-flow; ** - Continuous-flow or positive pressure demand

 $\begin{array}{l} \mathsf{A}(\mathsf{All \ classes}) = \mathsf{Organic \ vapours}, \mathsf{B} \ \mathsf{AUS \ or \ B1} = \mathsf{Acid \ gasses}, \mathsf{B2} = \mathsf{Acid \ gas \ or \ hydrogen \ cyanide(HCN)}, \mathsf{B3} = \mathsf{Acid \ gas \ or \ hydrogen \ cyanide(HCN)}, \mathsf{E} = \mathsf{Sulfur \ dioxide(SO2)}, \mathsf{G} = \mathsf{Agricultural \ chemicals}, \mathsf{K} = \mathsf{Ammonia}(\mathsf{NH3}), \mathsf{Hg} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Mercury}, \mathsf{NO} = \mathsf{NO} =$

* 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

^{^ -} Full-face

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

Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

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

Information on basic physical and chemical properties

Appearance	Clear water white liquid; mixes with water.		
	•		
Physical state	Liquid	Relative density (Water = 1)	1.05-1.07
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	7.0-8.0	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	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)	>1	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	The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models). Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. Inhalation of vapour is more likely at higher than normal temperatures.
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	The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is ofter characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis. Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Chronic	There exists limited evidence that shows that skin contact with the material is capable either of inducing a sensitisation reaction in a significant number of individuals, and/or of producing positive response in experimental animals.

Unimin Universit	TOXICITY	IRRITATION
Unimig Unicool	Not Available	Not Available

	TOXICITY	IRRITATION	
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye (rabbit): 10	0 mg - mild
propylene glycol	Oral (rat) LD50: 20000 mg/kgd ^[2]	0 mg/24h - mild	
		1)4 mg/3d Intermit Mod
			00 mg/7days mild
	ΤΟΧΙΟΙΤΥ	IRRITATION	
water	Oral (rat) LD50: >90000 mg/kg ^[2]	Not Available	
Legend:	1. Value obtained from Europe ECHA Registered Substances extracted from RTECS - Register of Toxic Effect of chemical S		rom manufacturer's SDS. Unless otherwise specified data
PROPYLENE GLYCOL	The material may cause skin irritation after prolonged or reporten characterised by skin redness (erythema) and swelling (spongiosis) and intracellular oedema of the epidermis. The acute oral toxicity of propylene glycol is very low, and lar generally occurs only at plasma concentrations over 1 g/L, wimpossible to reach toxic levels by consuming foods or supplinelated to either inappropriate intravenous administration or also low. Because of its low chronic oral toxicity, propylene g safe" (GRAS) for use as a direct food additive. Prolonged contact with propylene glycol is sessentially non-in produce slight transient conjunctivitis (the eye recovers after respiratory tract irritation. Inhalation of the propylene glycol ydycol not be used in applications where inhalation exposure theatrical productions or antifreeze solutions for emergency of Propylene glycol shows no evidence of being a carcinogen of Research has suggested that individuals who cannot tolerate develop allergic contact dermatitis. Other investigators believ in patients with eczema. One study strongly suggests a connection between airborne reactions, such as rhinitis or hives in children Another study suggested that the concentrations of PGEs (c is linked to increased risk of developing numerous respirator increased risk ranging from 50% to 180%. This concentration Patients with vulvodynia and interstitial cystitis may be especied some over the counter creams can cause intense burning. Panet creams made with propylene glycol often create extrem cigarette users who inhale propylene glycol often create extrem cigarette users who inhale propylene glycol often create extrem cigarette users who inhale propylene glycol often create extrem cigarette users who inhale propylene glycol often create extrem cigarette users who inhale propylene glycol often create extrem cigarette users who inhale propylene glycol often create extrem cigarette users who inhale propylene glycol often create extrem cigarette users who inhale propylene glycol administration of dr	the epidemis. Histologically there ge quantities are required to cause hich requires extremely high intake ements, which contain at most 1 g accidental ingestion of large quant lycol was classified by the U. S. For ritating to the skin. Undiluted propy the exposure is removed). Exposure apours appears to present no sign of mists could be irritating to some or human eye contact with the spra- aye wash stations. vic acid (a normal part of the glucos acid generally abundant during dige or of being genotoxic. Propylene glycol probably experie re that the incidence of allergic con concentrations of propylene glycol ounted as the sum of propylene glycol ounted as the sum of propylene glycol bast menopausal women who requir ne, uncomfortable burning along the ience dryness of the throat or short c (or have bad reactions) to propyl ich use PG as an excipient have b bycardia QRS and T abnormalitie centage (12% to 42%) of directly-in ng in its glucuronide-form. The spe essant -properties as an alcohol. Ir coma and acidosis. dider the category of animal feed an mL/kg)	may be intercellular oedema of the spongy layer e perceptible health damage in humans. Serious toxicity over a relatively short period of time. It would be nearly (%g of PG. Cases of propylene glycol poisoning are usually ities by children. The potential for long-term oral toxicity is bod and Drug Administration as "generally recognized as lene glycol is minimally irritating to the eye, and can re to mists may cause eye irritation. However, limited individuals It is therefore recommended that propylene ay mists of these materials is likely, such as fogs for se-metabolism process, readily converted to energy), acetic sistion), and propionaldehyde (a potentially hazardous ince a special form of irritation, but that they only rarely ttact dermatitis to propylene glycol may be greater than 2% in houses and development of asthma and allergic cool and glycol ethers) in indoor air, particularly bedroom air, i, including asthma, hay fever, eczema, and allergies, with ased paints and water-based system cleansers. <i>Vomen suffering with yeast infections may also notice that</i> e the use of an eostrogen cream may notice that brand e vulva and perianal area. Additionally, some electronic times of breath . As an alternative, some suppliers will put ene glycol. een seen in a number of people, particularly with large s on the ECG, arrhythmia, cardiac arrest, serum njected propylene glycol is eliminated/secreted in urine eed of renal filtration decreases as dosage increases, which o ne case, intravenous administration of propylene glycol- id is generally recognized as safe for dogs with an LD50 of
WATER	No significant acute toxicological data identified in literature	search.	
Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	0	Reproductivity	0
Serious Eye Damage/Irritation	0	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0
		0	 Data required to make classification available Data available but does not fill the criteria for classification Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

NOT AVAILABLE						
Ingredient	Endpoint	Test Duration	Effect	Value	Species	BCF
propylene glycol	Not Available					

water Not Available Not Available Not Available Not Available Not Available Not Available Do NOT discharge into sewer or waterways. Persistence and degradability Ingredient Persistence: Water/Soi Persistence: Air propylene glycol LOW LOW LOW water LOW LOW LOW	Chemwatch: 15-5713		Page 7 of 8				Issue Date: 01/01/2013	
Do NoT discharge into sewer or waterways. Persistence and degradability Ingredient Persistence: Water/Soil Persistence: Air propylene glycol LOW LOW water LOW LOW Bioaccumulative potential Ingredient Bioaccumulation	sion No: 2.1.1.1		Unimig Unicool				Print Date: 21/09/2015	
Persistence and degradability Persistence: Water/Soil Persistence: Air Ingredient Persistence: Water/Soil Dev propylene glycol LOW LOW water LOW LOW Bioaccumulative potential	water	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	
Ingredient Persistence: Water/Soil Persistence: Air propylene glycol LOW LOW water LOW LOW ioaccumulative potential Bioaccumulation								
propylene glycol LOW water LOW bioaccumulative potential LOW	aralatanaa and a	la aradahilitu						
water LOW Bioaccumulative potential Ingredient Bioaccumulation	ersistence and c	legradability						
Bioaccumulative potential Ingredient Bioaccumulation			r/Soil		Per	sistence: Air		
Ingredient Bioaccumulation	Ingredient	Persistence: Wate	r/Soil					
Ingredient Bioaccumulation	Ingredient propylene glycol	Persistence: Wate	r/Soil		LO	N		
	Ingredient propylene glycol water	Persistence: Wate	r/Soil		LO	N		
propylene glycol LOW (BCF = 1)	Ingredient propylene glycol water	Persistence: Wate	r/Soil		LO	N		
	Ingredient propylene glycol water iioaccumulative	Persistence: Wate	r/Soil		LO	N		

Mobility in soil

water

Ingredient	Mobility
propylene glycol	HIGH (KOC = 1)
water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods ► Recycle wherever possible or consult manufacturer for recycling options. Product / Packaging

- F	Consul	t S	tate L	and V	Vaste	Authority for	disposal.
	-						

LOW (LogKOW = -1.38)

- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

disposal

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

SECTION 15 REGULATORY INFORMATION

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

PROPYLENE GLYCOL(57-55-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

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

Australia Inventory of Chemical Substances (AICS)

National Inventory	Status
Australia - AICS	Υ
Canada - DSL	Υ
Canada - NDSL	N (propylene glycol; water)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (water)
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Y
USA - TSCA	Υ
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)

Australia Inventory of Chemical Substances (AICS)

SECTION 16 OTHER INFORMATION

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

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

The (M)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.

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