

1. COMPANY AND PRODUCT IDENTIFICATION

1.1	Identification – Product Name:	Window Cleaner Concentrate
1.2	Other means of identification	
	Synonym:	L0029
1.3	Recommended Use of the Chemical and Restrictions on Use:	For use in cleaning glass and windows
1.4	Name, Address, and Telephone Number of the Manufacturer, or other Responsible Party:	Christopher Bright P.O. Box 2300 Moorabbin VIC 3189
	Competent Person email address	christopheribright@gmail.com
1.5	Poisons Hotline (24 hrs):	13 11 26

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is a blue liquid of low viscosity (thin). This product has an odour of ammonia. May cause skin or eye irritation. Harmful to aquatic life. This product is not flammable.

Physical Hazards Summary		Not classifiable
Potential Health Hazards Summary		Skin irritation, Category 2 Eye irritation, Category 2
Potential Ecological Effects Summary		Acute aquatic toxicity, Category 3
2.1	Classification of Product	
	Classification as per GHS (Rev 3)/2009	Skin irritation, Category 2 Eye irritation, Category 2 Acute aquatic toxicity, Category 3
2.2	Label Elements GHS	
	Signal Word	WARNING
	Hazard Statements	H315 H320 H402 Causes skin irritation. Causes eye irritation. Harmful to aquatic life.
	Precautionary Statements: Prevention	P264 P270 P280 P261 P272 Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing mist, vapours or spray. Contaminated clothing should not be allowed out of the workplace. Avoid release to the environment.
	Precautionary Statements: Response	P273 P391 P305+P351+P338+P310 P302+P352 P321 Collect spillage. Dispose of contents in accordance with any local, State or Commonwealth regulations. IF IN EYES rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN wash with soap and water. Specific treatment: See first aid section on this SDS.

		P332+P313 P363 P333+P313 P301+P310	If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse. If skin irritation or a rash occurs, get medical advice/attention. IF SWALLOWED immediately call a POISON CENTER/doctor.
	Precautionary statements: Storage	None	None
	Precautionary Statements: Disposal	P501	Dispose of contents/container in accordance with all federal, state and local regulation.
	Hazard pictograms		
2.3	Unclassified Hazards	None	
2.4	Ingredients with unknown acute toxicity	None	

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical name (CAS #)	% w/w	GHS
Nonylphenol Ethoxylate (CAS # 26027-38-3)	<5%	Skin irritation, Category 2 (H315) Serious eye irritation, Category 2A (H319) Acute oral toxicity, Category 4 (H302) Acute aquatic toxicity, Category 2 (H401) Chronic aquatic toxicity, Category 2 (H413)
Ethyl Glycol Monobutyl Ether (CAS # 111-76-2)	<5%	Serious eye irritation, Category 2A (H315) Skin irritation, Category 2 (H315) Acute oral toxicity, Category 4 (H302) Acute dermal toxicity, Category 4 (H312) Acute respiratory toxin, Category 4 (H332)
Aqueous Ammonia (25%) (CAS # 1336-21-6)	1 – 2%	Skin corrosion, Category 1B (H315) Serious eye damage, Category 1 (H318) Acute oral toxicity, Category 4 (H302) Acute aquatic toxin, Category 1 (H400)
Ethanol (CAS# 64-17-5)	<10%	Flammable liquid, Category 2 (H225) Serious eye irritation, Category 2A (H319)
Water	Bulk	Not classifiable

4. FIRST-AID MEASURES

4.1	Description of Necessary Measures	
	Skin exposure:	If this product contaminates the skin, immediately begin decontamination with running water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim should seek immediate medical attention if any adverse exposure symptoms develop or irritation persists.
	Eye exposure:	If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Victim should "roll" eyes while being flushed. Minimum flushing is for 15 minutes. Seek medical attention immediately.

	Inhalation:	If this product is inhaled, remove victim to fresh air and place in a position comfortable for breathing. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.
	Ingestion:	If this product is swallowed, CALL POISON CENTER or PHYSICIAN FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING. Mouth should be rinsed with water if conscious. Never induce vomiting or give a diluent (e.g., water) to someone who is unconscious, having convulsions, or unable to swallow. If contaminated individual is convulsing, maintain an open airway and obtain immediate medical attention.
4.2	Most Important Symptoms/Effects:	Immediate: Inhalation exposure may cause coughing or sneezing/respiratory tract irritation or difficulty breathing. Symptoms of skin and eye contact may include redness and irritation. Ingestion may cause stomach pains, cramps, and gastritis. Delayed: Prolonged or repeated skin overexposure to this product may cause dermatitis (dry, red skin).
4.3	Indication of Immediate Medical Attention And Special Treatment Needed, If Necessary:	None known. TARGET ORGANS: Acute: Eyes, Skin
Victims of chemical exposure must be taken for medical attention if any adverse effects occur. Rescuers should be taken for medical attention if necessary. Take a copy of label and SDS to physician or health professional with victim.		

5. FIRE-FIGHTING MEASURES

Flammability properties		Flash Point °C: Not applicable			
		Auto-ignition Temperature °C: Not evaluated			
		Flammable Limits (in air by volume, %): Not evaluated			
5.1	Suitable and Unsuitable Extinguishing Media:	This material should not contribute to the intensity of a fire. Use extinguishing material suitable for ordinary combustibles.			
		Water spray	YES	Carbon dioxide	YES
		Foam	YES	Dry chemical	YES
		Halon	NO	Other	
5.2	Specific Hazards Arising from Chemical:	When involved in a fire, this material may decompose and produce irritating fumes and toxic gases, including carbon monoxide and dioxide.			
		<u>Explosion Sensitivity to Mechanical Impact:</u> None.			
		<u>Explosion Sensitivity to Static Discharge:</u> Vapours are not expected to ignite			
5.3	Special Protective Equipment and Precautions for Fire-Fighters:	Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.			

6. ACCIDENTAL RELEASE MEASURES

6.1	Personal Precautions	Uncontrolled releases should be responded to only by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area and protect people.
	Protective equipment:	For small releases (< 20 litres), clean up spilled liquid wearing gloves, goggles, face shield, and suitable body protection. Absorb with earth, sand or other non-combustible material and transfer to containers for proper disposal. Do not let the product enter drains.
	Emergency procedures:	Eliminate all ignition sources. Stop leak if you can do so without risk.
6.2	Environmental Precautions	Prevent release into the environment. Do not discharge into sewers or waterways. May produce harmful effects to marine organisms and their environment.
6.3	Methods and Materials for Containment and Cleaning Up	Use absorbent material for cleaning up spills. Collect spilled material for proper disposal. Decontaminate the area thoroughly. Place all spill residues in a suitable container. Dispose of in accordance with applicable Australian Federal, State, or local procedures, or appropriate local standards.

7. HANDLING AND STORAGE

7.1	Precautions for Safe Handling	All employees who handle this material should be trained to handle it safely. Open containers carefully on a stable surface. Ensure all connections are tight before transfer. Empty containers may contain residual liquid; therefore, empty containers should be handled with care. Keep away from ignition sources; no smoking. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this material. Remove contaminated clothing promptly.
7.2	Conditions for Safe Storage	Keep containers tightly closed. Store individual containers out of direct sunlight. Tanks should be stored away from intense heat or direct sunlight. Avoid freezing. Store away from incompatible materials. Material should be stored in secondary containers, or in a diked area, as appropriate. Storage and use areas should be covered with impervious materials. Keep container tightly closed when not in use. If appropriate, post warning signs in storage and use areas. Inspect all incoming containers before storage, to ensure containers are properly labelled and not damaged.
	Incompatibilities	No major incompatibilities.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

8.1	Appropriate Engineering Controls.	Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Avoid generating and inhaling mists. Use with local exhaust ventilation or while wearing organic vapour respirator or particulate respirator meeting the requirements of AS1715 and AS1716. Keep containers closed when not in use.			
8.2	Personal Protective Equipment				
	Respiratory protection:	None needed under normal conditions of use. Use only approved respirators if ventilation is inadequate to control mists or vapor.			
	Eye protection:	Use approved safety goggles or safety glasses. Splash goggles with a face shield may be needed if splash hazards exist.			
	Hand protection:	Wear chemical impervious gloves (e.g., Solvex™, Neoprene, Nitrile).			
	Body protection:	None normally needed. If needed, use body protection appropriate for task (e.g., Tyvek suit, rubber apron) to protect from splashes and sprays. Nomex coveralls are recommended for handling bulk product.			
8.3	Biological monitoring	Biological monitoring is required if ventilation is inadequate to maintain concentration of airborne hazardous chemicals below the following exposure standards. STEL sets the <i>short term exposure limit</i> , which is the maximum concentration of a substance to which a person can be exposed over a 15-minute period. The TWA sets a time-weighted average airborne concentration to which a person may be exposed. This product is a mixture. The following sets exposure standards only for its constituent parts. Exposure standards have not been determined for this product as a whole.			
8.3.1	Exposure standards [NOHSC:1003(1995)]	TWA (ppm)	TWA (mg/m ³)	STEL (ppm)	STEL (mg/m ³)
	Ethylene Glycol Monobutyl Ether	20	96.9	50	242
	Ammonia	25	17	35	24

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	This product is clear blue liquid.		
Odor	Ammonia-like	Odor Threshold	Not applicable
Melting Point °C	Not evaluated	pH	10
Initial Boiling Point °C	>100 °C	Boiling Point Range °C	Not evaluated
Flammability	Not flammable	Evaporation Rate (n-butyl acetate = 1)	Not evaluated
Vapor Density (air = 1)	Not evaluated	Vapor Pressure mm Hg @ 20°C:	Not evaluated
Solubility (in water)	Completely soluble	Relative density (water = 1)	1.0
Viscosity	Thin (like water)	Oil-Water Partition Coefficient	Not evaluated
How To Detect This Substance (Warning Properties):	This product will smell like ammonia.		

10. STABILITY AND REACTIVITY

10.1	Reactivity	Will not react with most other chemicals.
10.2	Chemical Stability	Stable under normal use and storage.
10.3	Possibility of hazardous reactions	Hazardous polymerization will not occur.
10.4	Conditions to avoid	Avoid mixing with incompatible substances.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicology Information

Note: This product has not been evaluated for its toxicity as a whole.

Component	Oral LD ₅₀ (mg/kg)	Dermal LD ₅₀ (mg/kg)	Inhalation LC ₅₀ (mg/m ³)	Skin Irritation	Serious eye damage
Aqueous Ammonia (25%) (CAS # 1336-21-6)	500 - 2000 mg/kg (Rat)	No data available	No data available	YES	Irritation
Nonylphenol Ethoxylate (CAS # 26027-38-3)	No data available	No data available	No data available	YES	Serious irritation
Ethyl Glycol Monobutyl Ether (CAS # 111-76-2)	1746 mg/kg (Rat)	>2000 mg/kg (Rat)	No data available	YES	Irritation

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.1 Ecological Information

Note: This product has not been evaluated for its ecologic impact as a whole.

Component	Toxicity to fish	Toxicity to daphnia	Bioaccumulation	Solubility	Biodegradability
Aqueous Ammonia (25%) (CAS # 1336-21-6)	0.89 mg/L mg/L (LC50, 96 hr, <i>Oncorhynchus mykiss</i>)	101 mg/L mg/L (EC50, 48 hr, <i>Daphnia magna</i>)	Not expected	Soluble	Readily biodegradable
Nonylphenol Ethoxylate (CAS # 26027-38-3)	6 mg/L (LC50, 96 hr, fish)	No data available	Moderate, may accumulate in water, soil and impact fauna and flora	Soluble	Complete biological degradability less than 60%
Ethyl Glycol Monobutyl Ether (CAS # 111-76-2)	1490 mg/L (LC50, 96 hr, bluegill sunfish)	835 mg/L (EC50, 48 hr, <i>Daphnia magna</i>)	Low	Soluble	Biodegradable

12.2	Persistence and Degradability	This product is expected to be readily biodegradable.
12.3	Bio-accumulative Potential	This product is not expected to bio-accumulate.
12.4	Mobility in Soil	When spilled onto soil, this product is expected to evaporate slowly.
12.5	Other Adverse Ecological Effects	This product may be harmful to aquatic life if large volumes of it are released into an aquatic environment.

13. DISPOSAL CONSIDERATIONS

	Preparing Wastes of this Product for Disposal	Waste disposal must be in accordance with appropriate Australian Federal, State, and local regulations or with local regulations.
	Disposal of Contaminated Packaging	Cleaned containers can be recycled or disposed of as non-contaminated waste, if authorized by your local authorities. Dispose of containers as required by local regulations.

14. TRANSPORT INFORMATION

Australian Domestic

14.1	UN Number	NOT CLASSIFIED AS DANGEROUS GOODS FOR TRANSPORT
14.2	Proper Shipping Name or Technical Name	
14.3	Transport Hazard Class(es)	
	Transport label(s) required	
14.4	Packing Group	
14.5	HAZCHEM Code	
14.6	Environmental Hazards for Transport Purposes	
14.7	Special Precautions for User	
14.8	Additional information	

15. REGULATORY INFORMATION

International

Part	Regulatory Programme	Classification
15.1	Montreal Protocol	Not applicable
15.2	The Stockholm Convention	Not applicable
15.3	The Rotterdam Convention	Not applicable
15.4	Basel Convention	Not applicable
15.5	International Convention for the Prevention of Pollution from Ships	Not applicable

Australian Commonwealth and State Regulations

Part	Regulatory Programme	Classification
15.6	Medicine/Poisons Schedule Number	Not applicable
15.7	Prohibition/ Notification/ Licensing requirements?	Not applicable
15.8	Controlled usage under <i>Agricultural and Veterinary Code Act 1994</i> (Cth) or otherwise (any applicable Commonwealth, State or Territory control-of-use legislation)	Not applicable
15.9	Chemical listed on the Australian Inventory of Chemical Substances (AICS)? (See <i>Industrial Chemicals (Notification and Assessment) Act 1989</i> (Cth) (and any condition of use associated with the listing on the AICS)	All ingredients in the product are listed on the AICS

16. OTHER INFORMATION

16.1	Original Preparation	18 November 2019
16.2	Revision History	0.0 June 2023
16.3	Prepared by	Marc Forrest Pty Ltd PO Box 2300 Moorabbin VIC 3189

DEFINITIONS OF TERMS

16.5	A large number of abbreviations and acronyms appear on this SDS. The following constitutes definitions of those commonly used terms.	
	Section 2	GHS: Global Harmonization System Model WHS: Australia's model Workplace Health and Safety Guidelines CLP: Classification and Packaging STOT: Specific Target Organ Toxicity
	Section 3	CAS #: Chemical Abstract Service index number
	Section 5	Health Hazard: 0 (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); 1 (materials that on exposure under fire conditions could cause irritation or minor residual injury); 2 (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); 3 (materials that can on short exposure could cause serious temporary or residual injury); 4 (materials that under very short exposure could cause death or major residual injury). Flammability Hazard Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System". Flash Point: Minimum temperature at which a liquid gives off sufficient vapours to form an ignitable mixture with air. Auto-ignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL: The lowest percent of vapour in air, by volume, that will explode or ignite in the presence of an ignition source. UEL: The highest percent of vapour in air, by volume, that will explode or ignite in the presence of an ignition source.
	Section 8	TLV - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (TWA), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level (C). Skin absorption effects must also be considered IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. The DFG - MAK is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. NIOSH is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). NIOSH issues exposure guidelines called Recommended Exposure Levels (RELs) . When no exposure guidelines are established, an entry of NE (Not Established) is made for reference.
	Section 11	LD₅₀ : Lethal Dose (solids & liquids) which kills 50% of the exposed animals; LC₅₀ : Lethal Concentration (gases) which kills 50% of the exposed animals; ppm: Concentration expressed in parts of material per million parts of air or water; mg/m³ : Concentration expressed in weight of substance per volume of air; mg/kg: Quantity of material, by weight, administered to a test subject, based on their body weight in kg IARC - the International Agency for Research on Cancer; NTP - the National Toxicology Program, RTECS - the Registry of Toxic Effects of Chemical Substances, TDLo , the lowest dose to cause a symptom and TCLo the lowest concentration to cause a symptom; TD₀ , LDLo , and LD₀ , or TC , TC₀ , LCLo , and LCo , the lowest dose (or concentration) to cause lethal or toxic effects. BEI - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.
	Section 12	LC₅₀: The lowest concentration in water which kills 50% of the test subjects. EC₅₀: The Effect Concentration in water at which 50% of the test species if affected.

DISCLAIMER

The information in this SDS has been provided in good faith, and is believed to the best of the author's knowledge to be accurate as of the date of preparation. However, the author does not represent this to be a comprehensive and exhaustive assessment of the product's risks. There is always a chance that risks were beyond the state of scientific knowledge at the time of writing. It is expected that individuals receiving the information will exercise their independent judgement in determining its appropriateness for a particular purpose. **Accordingly, we shall not be responsible for damages of any kind resulting from the use or reliance upon the information in this document.**