Safety Data Sheet

Pyroneg

Revision: 2018-02-02 **Version:** 01.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier
Product name: Pyroneg

1.2 Recommended use and restrictions on use
Identified uses:
Special laboratory and instrument detergent
Restrictions of use:
Uses other than those identified are not recommended

1.3 Details of the supplier
Diversey Australia Pty. Limited
29 Chifley St, Smithfield, NSW, 2164, Australia
Telephone: 1800 647 779 (toll free)
Fax: (02) 9725 5767
Email: aucustserv@diversey.com
Website: www.diversey.com/

1.4 Emergency telephone number
Call 1800 033 111 (24hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Serious eye damage, Category 1

2.2 Label elements

Signal word: Danger

Hazard statements:
H318 - Causes serious eye damage.

Prevention statement(s):
P280 - Wear eye or face protection.

Response statement(s):
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 CENTRE, doctor or physician.

2.3 Other hazards

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS number	EC number	Weight percent
sodium carbonate	497-19-8	207-838-8	30-60
sodium alkylbenzenesulphonate	90194-45-9	290-656-6	3-10
propane-1,2-diol	57-55-6	200-338-0	3-10
Propylene oxide	75-56-9	200-879-2	< 0.01
Cadmium	7440-43-9	231-152-8	< 0.01

Non-hazardous ingredients are the remainder and add up to 100%.

* Polymer.
Workplace exposure limit(s), if available, are listed in subsection 8.1.
For the full text of the H and AUH phrases mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Get medical attention or advice if you feel unwell.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
Eye contact:	Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.
Ingestion:	Rinse mouth. Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.
First aid facilities:	Eyewash facilities should be considered in a workplace where necessary.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	No known effects or symptoms in normal use.
Skin contact:	No known effects or symptoms in normal use.
Eye contact:	Causes severe or permanent damage.
Ingestion:	No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

Poison Information Center: Call 13 11 26 (Australia Wide).

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No special hazards known.

5.3 Advice for firefighters
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

5.4 Hazchem code
None allocated

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear eye/face protection.

6.2 Environmental precautions
Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up
Collect mechanically.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin

thoroughly after handling. Take off immediately all contaminated clothing. Use personal protective equipment as required. Avoid contact with eyes. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Keep only in original packaging. Store in a closed container.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	Long term value(s) (TWA)	Short term value(s) (STEL)	Peak value(s)
propane-1,2-diol	150 ppm 474 mg/m³ 10 mg/m³		
Propylene oxide	20 ppm 48 mg/m³		
Cadmium	0.01 mg/m³		

Biological limit values, if available:

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment
Eye / face protection: Safety glasses or goggles (EN 166).
Hand protection: No special requirements under normal use conditions.
Body protection: No special requirements under normal use conditions.
Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Method / remark
Physical State: Solid	
Appearance: Powder	
Colour: Opaque Pink	
Odour: Product specific	
Odour threshold: Not applicable	
pH: Not applicable. (neat)	
Dilution pH: ≈ 10 (1%)	
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	
Flash point (°C): Not applicable.	
Sustained combustion: Not applicable. *(UN Manual of Tests and Criteria, section 32, L.2)*	
Evaporation rate: Not determined	
Flammability (solid, gas): Not determined	
Upper/lower flammability limit (%): Not determined	
Vapour pressure: Not determined	
Vapour density: Not determined	
Relative density: Not determined	
Solubility in / Miscibility with Water: Soluble	
Partition coefficient: n-octanol/water No information available.	
Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3	
Autoignition temperature: Not determined	

Decomposition temperature: Not applicable.
Viscosity: Not determined
Explosive properties: Not explosive.
Oxidising properties: Not oxidising

9.2 Other information
Surface tension (N/m): Not determined
Corrosion to metals: Not determined Not applicable to solids or gases

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
Reacts with acids.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium carbonate	LD_{50}	2800	Rat	Method not given	
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol	LD_{50}	> 10000	Rat	Method not given	
Propylene oxide		No data available			
Cadmium		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium carbonate	LD_{50}	> 2000	Rabbit	Method not given	
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol	LD_{50}	> 2000	Rabbit	Method not given	
Propylene oxide		No data available			
Cadmium		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC_{50}	2.3 (dust)	Rat	OECD 403 (EU B.2)	2
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol	LC_{50}	> 317 (mist) No mortality	Rabbit	Non guideline test	

		observed			
Propylene oxide		No data available			
Cadmium		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Not irritant	Rabbit	Method not given	
sodium alkylbenzenesulphonate	No data available			
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
Propylene oxide	No data available			
Cadmium	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	Irritant	Rabbit	Method not given	
sodium alkylbenzenesulphonate	No data available			
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
Propylene oxide	No data available			
Cadmium	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium alkylbenzenesulphonate	No data available			
propane-1,2-diol	No data available			
Propylene oxide	No data available			
Cadmium	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium carbonate	Not sensitising		Method not given	
sodium alkylbenzenesulphonate	No data available			
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Propylene oxide	No data available			
Cadmium	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium carbonate	No data available			
sodium alkylbenzenesulphonate	No data available			
propane-1,2-diol	No data available			
Propylene oxide	No data available			
Cadmium	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium carbonate	No data available		No data available	
sodium alkylbenzenesulphonate	No data available		No data available	
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
Propylene oxide	No data available		No data available	
Cadmium	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium carbonate	No evidence for carcinogenicity, weight-of-evidence
sodium alkylbenzenesulphonate	No data available
propane-1,2-diol	No evidence for carcinogenicity, negative test results
Propylene oxide	No data available
Cadmium	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium carbonate			No data available				
sodium alkylbenzenesulphonate			No data available				
propane-1,2-diol			No data available				No evidence for reproductive toxicity
Propylene oxide			No data available				
Cadmium			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
propane-1,2-diol		No data available				
Propylene oxide		No data available				
Cadmium		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
propane-1,2-diol		No data available				
Propylene oxide		No data available				
Cadmium		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
propane-1,2-diol		No data available				
Propylene oxide		No data available				
Cadmium		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium carbonate			No data available					
sodium alkylbenzenesulphonate			No data available					
propane-1,2-diol			No data available					
Propylene oxide			No data available					
Cadmium			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium alkylbenzenesulphonate	No data available
propane-1,2-diol	No data available
Propylene oxide	No data available
Cadmium	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium carbonate	No data available
sodium alkylbenzenesulphonate	No data available
propane-1,2-diol	No data available
Propylene oxide	No data available
Cadmium	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	LC_{50}	300	*Lepomis macrochirus*	Method not given	96
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol	LC_{50}	> 1000	*Fish*	Method not given	24
Propylene oxide		No data available			
Cadmium		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate	EC_{50}	265	*Daphnia magna Straus*	Method not given	96
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol	EC_{50}	> 100	*Daphnia*	Method not given	48
Propylene oxide		No data available			
Cadmium		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium carbonate		No data available			-
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol	EC_{50}	24200	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
Propylene oxide		No data available			
Cadmium		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium carbonate		No data available			-
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol		No data available			-
Propylene oxide		No data available			
Cadmium		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium carbonate		No data available			
sodium alkylbenzenesulphonate		No data available			
propane-1,2-diol	EC_0	> 20000	*Pseudomonas putida*	Method not given	18 hour(s)
Propylene oxide		No data available			
Cadmium		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
propane-1,2-diol		No data available				
Propylene oxide		No data available				
Cadmium		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium carbonate		No data available				
sodium alkylbenzenesulphonate		No data available				
propane-1,2-diol	NOEC	13020	*Ceriodaphnia dubia*	Method not given	7 day(s)	
Propylene oxide		No data available				
Cadmium		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
sodium alkylbenzenesulphonate		No data available				
propane-1,2-diol		No data available			-	
Propylene oxide		No data available				
Cadmium		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
propane-1,2-diol		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
propane-1,2-diol		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data			-	

		available				
propane-1,2-diol		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
propane-1,2-diol		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
sodium carbonate		No data available			-	
propane-1,2-diol		No data available			-	

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
sodium carbonate	No data available		Rapidly hydrolysible	

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
sodium carbonate					Not applicable (inorganic substance)
sodium alkylbenzenesulphonate					Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
Propylene oxide					No data available
Cadmium					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
sodium carbonate	No data available		No bioaccumulation expected	
sodium alkylbenzenesulphonate	No data available			
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
Propylene oxide	No data available			
Cadmium	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium carbonate	No data available			No bioaccumulation expected	
sodium alkylbenzenesulphonate	No data available				
propane-1,2-diol	No data available				
Propylene oxide	No data available				
Cadmium	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
sodium carbonate	No data available				Potential for mobility in soil, soluble in water
sodium alkylbenzenesulphonate	No data available				

propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
Propylene oxide	No data available				
Cadmium	No data available				

12.5 Other adverse effects
No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging
Recommendation: Dispose of observing national or local regulations.

SECTION 14: Transport information

ADG, IMO/IMDG, ICAO/IATA
14.1 UN number: Non-dangerous goods
14.2 UN proper shipping name: Non-dangerous goods
14.3 Transport hazard class(es): Non-dangerous goods
14.4 Packing group: Non-dangerous goods
14.5 Environmental hazards: Non-dangerous goods
14.6 Special precautions for user: Non-dangerous goods
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

Hazchem code: None allocated

SECTION 15: Regulatory information

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

National regulations Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by Safework Australia.

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classification Globally Harmonised System of Classification and Labelling of Chemicals (GHS) as published by Safework Australia.

Inventory listing(s) AICS (Australian Inventory of Chemical Substances): All components are listed on AICS, or are exempt.

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS31000320 **Version:** 01.0 **Revision:** 2018-02-02

Full text of the H phrases mentioned in section 3:
Additional information:
Respirators: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

Work practices - solvents: Organic solvents may present both a health and flammability hazard. It is recommended that engineering controls should be adopted to reduce exposure where practicable (for example, if using indoors, ensure explosion proof extraction ventilation is available). Flammable or combustible liquids with explosive limits have the potential for ignition from static discharge. Refer to AS 1020 (The control of undesirable static electricity) and AS 1940 (The storage and handling of flammable and combustible liquids) for control procedures.

Exposure standards - Time Weighted Average (TWA) or Workplace Exposure Standard (WES) (NZ): Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

Personal protective equipment guidelines: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Health effects from exposure: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Safety Data Sheet which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations and acronyms:

- ATE - Acute Toxicity Estimate
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LD50 - Lethal Dose, 50% / Median Lethal dose
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- EC No. - European Community Number

End of Safety Data Sheet