

Safety Data Sheet

LIQUID PYRONEG

Revision: 2023-12-13

Version: 01.1

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier Product name: LIQUID PYRONEG

1.2 Recommended use and restrictions on use Identified uses: Cleaning medical instruments Restrictions of use: Uses other than those identified are not recommended

1.3 Details of the supplier

DIVERSEY NEW ZEALAND LTD. 24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand Telephone: 0800 803 615 (toll free)

Website: www.diversey.com

1.4 Emergency telephone number Seek medical advice (show the label or safety data sheet where possible) Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, oral, Category 5 Corrosive to metals, Category 1 Skin corrosion, Category 1C Acute aquatic toxicity, Category 2 Terrestrial vertebrates, Category 3 Serious eye damage, Category 1

2.2 Label elements



Signal word: Danger

Hazard statements:

- H314 Causes severe skin burns and eye damage.
- H303 May be harmful if swallowed.
- H401 Toxic to aquatic life.
- H433 Harmful to terrestrial vertebrates.
- H290 May be corrosive to metals.

Prevention statement(s):

- P233 Keep container tightly closed.
- P234 Keep only in original packaging.
- P264 Wash face, hands and any exposed skin thoroughly after handling.
- P280 Wear protective gloves, protective clothing and eye or face protection.

Response statement(s):

- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.

Storage statement(s):

P405 - Store locked up. P406 - Store in corrosive-resistant container with a resistant inner liner.

Disposal statement(s):

P501 - Dispose of unused content as chemical waste.

2.3 Other hazards

No other hazards known.

2.4 Classification diluted product:

Recommended maximum concentration (% w/w): 0.4

Not classified as hazardous

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixtures

Ingredient(s)	CAS#	EC number	Weight percent
Alcohols, C12-14, ethoxylated	68439-50-9	500-213-3	3-10
potassium alkylbenzenesulphonate	85480-57-5	287-337-9	1-3
potassium hydroxide	1310-58-3	215-181-3	1-3
ethanol	64-17-5	200-578-6	0.1-1
Propan-2-ol	67-63-0	200-661-7	0.01-0.1
butanone	78-93-3	201-159-0	0.01-0.1
4-methylpentan-2-one	108-10-1	203-550-1	< 0.01
phosphoric acid	7664-38-2	231-633-2	-

[4] Polymer.

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

Workplace exposure limit(s), if available, are listed in subsection 8.1.

SECTION 4: First aid measures

4.1 Description of first aid measures	
General Information:	If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.
Inhalation:	Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if you feel unwell.
Skin contact:	Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician.
Eye contact:	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 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. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.
First aid facilities:	Shower and eyewash facilities should be considered in a workplace where necessary.
4.2 Most important symptoms and effe	ects, both acute and delayed
Inhalation:	No known effects or symptoms in normal use.
Skin contact:	Causes severe burns.

Eye contact: Causes severe or permanent damage. Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of Ingestion: oesophagus and stomach.

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 0800 764 766 (0800 POISON)

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

2R

- 2X
 - 2 Fine water spray
 - R Liquid-tight chemical protective clothing and breathing apparatus. Dilute.
 - X Liquid-tight chemical protective clothing and breathing apparatus. Contain.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders).

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. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. 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)	Short term value(s)	Ceiling value(s)
potassium hydroxide			2 mg/m ³

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 <u>undiluted</u> product: Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls:	If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.
Appropriate organisational controls:	Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment	
Eye / face protection:	Safety glasses or goggles (AS/NZS 1337.1). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.
Hand protection:	Chemical-resistant protective gloves (AS/NZS 2161.10). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature. Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm In consultation with the supplier of protective gloves a different type providing similar protection may
	be chosen.
Body protection:	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).
Respiratory protection:	No special requirements under normal use conditions.
Environmental exposure controls:	Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the <u>diluted</u> product:

Recommended maximum concentration (% w/w): 0.4

Appropriate engineering controls: Appropriate organisational controls:	No special requirements under normal use conditions. No special requirements under normal use conditions.
Personal protective equipment Eye / face protection: Hand protection: Body protection: Respiratory protection:	No special requirements under normal use conditions. No special requirements under normal use conditions. No special requirements under normal use conditions 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

Physical state: Liquid Colour: Clear , Purple Odour: Product specific Odour threshold: Not applicable pH: > 12 (neat) Dilution pH: > 11 (1%) Melting point/freezing point (°C): Not determined Initial boiling point and boiling range (°C): Not determined

Flammability (liquid): Not flammable. 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 applicable to liquids Lower and upper explosion limit/flammability limit (%): Not determined Vapour pressure: Not determined Relative density: ≈ 1.04 (20 °C) Relative vapour density: Not determined. Particle characteristics: No data available. Solubility in / Miscibility with water: Fully miscible Method / remark

ISO 4316 ISO 4316 Not relevant to classification of this product

Not relevant to classification of this product

OECD 109 (EU A.3) Not relevant to classification of this product Not applicable to liquids.

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: Corrosive

Weight of evidence

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): 3500

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)
Alcohols, C12-14, ethoxylated		No data available			
potassium alkylbenzenesulphonate	LD 50	1080			
potassium hydroxide	LD 50	333	Rat	OECD 425	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/kg)			time (h)
Alcohols, C12-14, ethoxylated		No data			
		available			
potassium alkylbenzenesulphonate		No data			
		available			
potassium hydroxide		No data			
		available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated		No data			

	available		
potassium alkylbenzenesulphonate	No data available		
potassium hydroxide	No data available		

Irritation and corrosivity

Skin	irritation	and	corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	Corrosive	Rabbit	Draize test	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	No data available			

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	Not sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C12-14, ethoxylated	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity	, <u>,</u>			
Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
Alcohols, C12-14, ethoxylated	No data available		No data available	
potassium alkylbenzenesulphonate	No data available		No data available	
potassium hydroxide	No evidence for mutagenicity, negative test results	Method not given	No data available	

Carcinogenicity

Ingredient(s)	Effect
Alcohols, C12-14, ethoxylated	No data available
potassium alkylbenzenesulphonate	No data available
potassium hydroxide	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value	Species	Method	Exposure	Remarks and other effects
			(mg/kg bw/d)			time	reported
Alcohols, C12-14,			No data				
ethoxylated			available				
potassium			No data				
alkylbenzenesulphonat			available				
е							
potassium hydroxide			No data				No evidence for reproductive
			available				toxicity

Repeated dose toxicity

Sub-							
	Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs

	(mg/kg bw/d)	ti	ime (days)	affected
Alcohols, C12-14, ethoxylated	No data			
	available			
potassium alkylbenzenesulphonate	No data			
	available			
potassium hydroxide	No data			
	available			

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
Alcohols, C12-14, ethoxylated		No data				
		available				
potassium alkylbenzenesulphonate		No data				
		available				
potassium hydroxide		No data				
		available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value	Species	Method		Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
Alcohols, C12-14, ethoxylated		No data				
		available				
potassium alkylbenzenesulphonate		No data				
		available				
potassium hydroxide		No data				
		available				

Chronic toxicity

Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)			time	organs affected	
Alcohols, C12-14,			No data					
ethoxylated			available					
potassium			No data					
alkylbenzenesulphonat			available					
e								
potassium hydroxide			No data					
			available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Alcohols, C12-14, ethoxylated	No data available
potassium alkylbenzenesulphonate	No data available
potassium hydroxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Alcohols, C12-14, ethoxylated	No data available
potassium alkylbenzenesulphonate	No data available
potassium hydroxide	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)
Alcohols, C12-14, ethoxylated		No data			
		available			
potassium alkylbenzenesulphonate		No data			

		available			
potassium hydroxide	LC 50	80	Various	Weight of evidence	24
			species		

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated		No data			
		available			
potassium alkylbenzenesulphonate		No data			
		available			
potassium hydroxide	EC 50	30 - 1000	Daphnia	Weight of evidence	
			magna Straus		

Aquatic short-term toxicity - algae					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C12-14, ethoxylated		No data available			
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Alcohols, C12-14, ethoxylated		No data available			
potassium alkylbenzenesulphonate		No data available			
potassium hydroxide		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
Alcohols, C12-14, ethoxylated		No data			
		available			
potassium alkylbenzenesulphonate		No data			
		available			
potassium hydroxide	EC 50	22	Photobacteriu	Method not given	15
			m		minute(s)
			phosphoreum		

Aquatic long-term toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Alcohols, C12-14, ethoxylated		No data available				
potassium alkylbenzenesulphonate		No data available				
potassium hydroxide		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
		(mg/l)			time	
Alcohols, C12-14, ethoxylated		No data				
		available				
potassium alkylbenzenesulphonate		No data				
		available				
potassium hydroxide		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
potassium hydroxide		No data				
		available				

Terrestrial toxicity Terrestrial toxicity - soil invertebrates, including earthworr	ms, if availabl	e:				
Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed

	(mg/kg dw soil)		time (days)	
potassium hydroxide	No data available			

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
potassium hydroxide		No data available				

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
potassium hydroxide		No data				
		available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
potassium hydroxide		No data				
		available				

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation -	photodegradation in	⊨air, if a\	/ailable:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
potassium hydroxide	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
potassium hydroxide	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Туре	Half-life time	Method	Evaluation	Remark
potassium hydroxide		No data available			

Biodegradation Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
Alcohols, C12-14, ethoxylated				OECD 301F	Readily biodegradable
potassium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	> 89% 89% in 29 day(s)	Weight of evidence OECD 301B	Readily biodegradable
potassium hydroxide					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
potassium hydroxide					No data available

12.3 Bioaccumulative potential Partition coefficient n-octanol/water (lo Water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
Alcohols, C12-14, ethoxylated	No data available			
potassium alkylbenzenesulphonate	No data available			
potassium hydroxide	No data available		Not relevant, does not	
			bioaccumulate	

Bioconcentration factor (BCF)				
Ingredient(s)	Value	Species	Method	Evaluation	Remark

Alcohols, C12-14, ethoxylated	No data available		
potassium alkylbenzenesulphonat e	No data available		
potassium hydroxide	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
Alcohols, C12-14, ethoxylated	No data available				
potassium alkylbenzenesulphonate	No data available				
potassium hydroxide	No data available				Low potential for adsorption to soil

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

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

Empty packaging Recommendation: Suitable cleaning agents:

Dispose of observing national or local regulations. Water, if necessary with cleaning agent.

SECTION 14: Transport information



Hazchem code: 2R 2X IMO/IMDG EmS: F-A, S-B

This product has been classified, labelled and package in accordance with the requirements of the NZ Land Transport Rule: Dangerous Goods, ADG, and the provisions of the IMDG Code.

Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

HSNO Approval Number HSR002526.

Group standard Inventory Listing(s)	Cleaning Products (Corrosive) Group Standard 2020 New Zealand: NZIoC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt
HSNO Classification	 6.1E - Acutely toxic (oral) 8.1A - Corrosive to metals 8.2C - Corrosive to dermal tissue 8.3A - Corrosive to ocular tissue 9.1D - Slightly harmful to the aquatic environment or are otherwise designed for biocidal action 9.3C - Harmful to terrestrial vertebrates

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: MS3200209

Version: 01.1

Revision: 2023-12-13

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 8

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).

Abbreviations and acronyms:

- DNEL Derived No Effect Limit
- AUH Non GHS hazard statement
- PNEC Predicted No Effect Concentration
- ATE Acute Toxicity Estimate
- LD50 Lethal Dose, 50% / Median Lethal dose LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 effective concentration, 50%
 NOEL No observed effect level
- NOAEL No observed adverse effect level
- STOT-RE Specific target organ toxicity (repeated exposure)
- STOT-SE Specific target organ toxicity (single exposure)
- EC No. European Community Number
- OECD Organisation for Economic Cooperation and Development

End of Safety Data Sheet