This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (July 2020).

SAFETY DATA SHEET



1. Identification

Product name	: Pine O Cleen Disinfectant Liquid Hospital Grade Eucalyptus
SDS no.	: PSDS9800388
Formulation #	: FRM3095422
Supplier	: AUSTRALIA RB (Hygiene Home) Australia Pty Ltd 680 George St , Sydney, NSW 2000 Tel: +61 (0)2 9857 2000
	NEW ZEALAND RB (Hygiene Home) New Zealand Limited 2 Fred Thomas Drive, Takapuna Auckland , New Zealand 0622 Tel: +64 9 484 1400
Poison Information contact:	: Australia - 13 11 26 New Zealand - 0800 764 766 or 0800 POISON
<u>Uses</u>	
Product use	Surface Care Germ protection Consumer use
2. Hazard identifi	ation
Classification of the substance or mixture	: SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
GHS label elements	
Hazard pictograms	
Signal word	: WARNING
Hazard statements	: Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
Precautionary statements	
General	: Keep out of reach of children. If medical advice is needed, have product containe or label at hand.
Prevention	: Wash hands thoroughly after handling.
Response	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advi attention.
Storage	: Not applicable.
Disposal	: Not applicable

3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	% (w/w)	CAS number
quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl,chlorides	≤2.2	68424-85-1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

4. First-aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effe	<u>cts, acute and delayed</u>		
Potential acute health effects			
Eye contact :	Causes serious eye irritation.		
Inhalation :	No known significant effects or critical hazards.		
Skin contact :	Causes skin irritation.		
Ingestion :	No known significant effects or critical hazards.		
Over-exposure signs/symptoms			
Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness		
Inhalation :	No specific data.		
Skin contact :	Adverse symptoms may include the following: irritation redness		
Ingestion :	No specific data.		

4. First-aid measures

Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician		In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: 1	No specific treatment.
Protection of first-aiders		No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

5. Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire, hazardous decomposition products may be produced.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hazchem code	: Not applicable

6. Accidental release measures

Personal precautions, protect	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and material for con	ainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6. Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Contro	parameters

Australia

Occupational exposure limits

No exposure standard allocated.

New Zealand

Occupational exposure limits

No exposure standard allocated.

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

8. Exposure controls/personal protection

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Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>			
Physical state	:	Liquid. [Clear]	
Colour	:	Green. [Light]	
Odour	:	eucalyptus odour	
Odour threshold	:	Not available.	
рН	:	9.8 to 10.4 [Conc. (% w/w): 100%]	
Melting point/freezing point	:	Not available.	
Boiling point, initial boiling point, and boiling range	:	Not available.	
Flash point	:	Not available.	
Evaporation rate	:	Not available.	
Flammability	:	Not available.	
Lower and upper explosion limit/flammability limit	1	Not available.	
Vapour pressure	:	Not available.	
Relative vapour density	:	Not available.	
Relative density	:	1.003 to 1.013	
Solubility(ies)	:		
Media		Result	
cold water hot water		Easily soluble Easily soluble	
Partition coefficient: n- octanol/water	:	Not applicable.	
Auto-ignition temperature	1	Not available.	
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9. Physical and chemical properties

Decomposition temperature	1	Not available.
Viscosity	:	Not available.
Particle characteristics		
Median particle size	:	Not applicable.

10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	LD50 Dermal	Rabbit	2848 mg/kg	-
	LD50 Dermal LD50 Oral LD50 Oral	Rabbit Rat Rat	3413 mg/kg 344 mg/kg 398 mg/kg	- - -

Conclusion/Summary

Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	Skin - Severe irritant	Rabbit	-	25 mg	-

Conclusion/Summary

Skin

Eyes

Calculation method Causes skin irritation.

- Calculation method Causes serious eye irritation.
- **Respiratory** Based on available data, the classification criteria are not met.

Sensitisation

quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chloridesskinGuinea pigNot sensitizing	

<u>conclusion/summary</u>	
Skin	Base

Based on available data, the classification criteria are not met.

11. Toxicological information

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Respiratory

Product/ingredient name	Test	Experiment	Result
quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473 In vitro Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
Conclusion/Summary Carcinogenicity Not available.	Based on available da	ita, the classification criteria are not n	net.
Conclusion/Summary <u>Reproductive toxicity</u> Not available.	Based on available da	ta, the classification criteria are not n	net.
Conclusion/Summary <u>Teratogenicity</u>	Based on available da	ita, the classification criteria are not n	net.

Not available.

Conclusion/Summary Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available.

of exposure

sure

Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	1	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
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11. Toxicological information

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure	
Potential immediate : effects	Not available.
Potential delayed effects :	Not available.
Potential immediate : effects	Not available.
Potential delayed effects :	Not available.
Potential chronic health effect	t <u>s</u>
Not available.	
Conclusion/Summary	Based on available data, the classification criteria are not met.

Conclusion/Summary	Dased of available data, the classification chiefla are not
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Germ Cell Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
	23011.73 mg/kg 73584.01 mg/kg

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	Acute EC50 0.016 mg/l	Daphnia	48 hours
	Acute LC50 64 ppb Fresh water Chronic EC10 0.009 mg/l	Fish - Oncorhynchus mykiss Algae	96 hours 72 hours

Conclusion/Summary

Calculation method Harmful to aquatic life with long lasting effects.

Persistence and degradability

Conclusion/Summary	Based on available data, the classification criteria are not met.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	-	-	Readily

Bioaccumulative potential

Not available.

Date of issue

12. Ecological information

Mobility in soil

Soil/water	partition
coefficient	(K _{oc})

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

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	ADG	ADR/RID	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Hazchem code : Not applicable

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons		
Not scheduled		
Australian Inventory of Industrial Chemicals (AIIC)	All components are listed or exempted.	
ARTG Number:	AUST L 354698	
New Zealand Inventory of Chemicals (NZIoC)	All components are listed or exempted.	
HSNO Group Standard	Cleaning Products (Subsidiary Hazard)	
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15. Regulatory information

HSNO Approval Number	HSR002530
Approved Handler Requirement	Not applicable.
Tracking Requirement	Not applicable.

16. Other information

Key to abbreviations	 ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods GHS = Globally Harmonized System of Classification and Labelling of Chemicals IBC = Internediate Bulk Container SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations SWA = Safe Work Australia HSNO = Hazardous Substances and New Organisms Act 1996 Z/12/2023
Date of issue / Date of revision	: 🖉2/12/2023
Version	: 4.0 (Version for updated GHS Revision 7 PSDS Template)

Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Calculation method
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Please read all labels carefully before using product.