SAFETY DATA SHEET

Pine O Cleen Disinfectant

1. Identification of the material and supplier

Names

Product name: Pine O Cleen Disinfectant
SDS no.: 30441 - SD AU v15.2
Formulation #:
18354 - AU & 0351471 (LEMON)
18350 - AU & 0284171 (PINE)
153310 - AU & 0351467 (LAVENDER)
151777 - AU & 0351468 (MOUNTAIN FRESH)
151776 - AU & 0351472 (POT POURRI)
10068 - AU & 0351466 (EUCALYPTUS)

Supplier

AUSTRALIA
Reckitt Benckiser (Australia) Pty Limited
ABN: 17 003 274 655
680 George St Sydney NSW 2000
Tel: +61 (0)2 9857 2000

NEW ZEALAND
Reckitt Benckiser (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

Material uses:
Surface Disinfectant.

Product use:
Consumer

UPC Code / Sizes: 500 mL, 1.25 L PET bottle and cap

Section 2. Hazard(s) identification

Classification of the substance or mixture:
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms:

Signal word: WARNING

Hazard statements:
Causes serious eye irritation.
Causes skin irritation.

Precautionary statements

General:
Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention:
Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling.

Response:
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. 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 attention.

Date of issue: 15/12/2016
Section 2. Hazard(s) identification

Storage: Not applicable.
Disposal: Not applicable.
Supplemental label elements:
- **Ingredient Declaration**
  Per 100 g of product contains 1.5 g of Benzalkonium Chloride
  Contains less than 5% Nonionic Surfactants
  Contains less than 5% EDTA
  Contains less than 5% Phosphates
  Disinfectant
  Perfume
  Contains Citronellol, Geraniol, Limonene and Linalool (Lavender Variant)

Other hazards which do not result in classification: None known.

Section 3. Composition and ingredient information

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides</td>
<td>≤3</td>
<td>68424-85-1</td>
</tr>
</tbody>
</table>

Other Non-hazardous ingredients to 100%

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

Section 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.

**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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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/effects, acute and delayed

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

Date of issue: 15/12/2016
Section 4. First aid measures

**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

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**

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)

Section 5. Firefighting 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 or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**

No specific data.

**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.

Section 6. Accidental release measures

**Personal precautions, protective 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).
Section 6. Accidental release measures

Methods and material for containment 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.

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.

Section 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. 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.

Section 8. Exposure controls and personal protection

Control parameters

Australia

Occupational exposure limits

None.

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

Date of issue: 15/12/2016
Section 8. Exposure controls and personal protection

**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**
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. 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.

Section 9. Physical and chemical properties

**Appearance**

**Physical state**
Liquid. [Clear.]

**Colour**
Pine - Brown
Eucalyptus - Green
Mountain Fresh - Blue
Lemon / lemon lime twist - Yellow
Pot Pourri - Pink
Lavender -Mauve

**Odour**
Characteristic.

**Odour threshold**
Not available.

**pH**
9.8 to 10.4 [Conc. (% w/w): 100%]

**Melting point**
Not available.

**Boiling point**
Not available.

**Flash point**
Closed cup: >93.3°C (>199.9°F)

**Evaporation rate**
Not available.

**Flammability (solid, gas)**
Not available.

**Lower and upper explosive (flammable) limits**
Not available.

**Vapour pressure**
Not available.

**Vapour density**
Not available.

**Relative density**
1.003 to 1.013

**Solubility**
Not available.

**Solubility in water**
Not available.
Section 9. Physical and chemical properties

Partition coefficient: n-octanol/water : Not available.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Not available.
Flow time (ISO 2431) : Not available.

Section 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.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2848 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>3413 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>344 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>398 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

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

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides</td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>25 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Based on Calculation method: Causes skin irritation.

Sensitisation

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides</td>
<td>skin</td>
<td>Guinea pig</td>
<td>Not sensitizing</td>
</tr>
</tbody>
</table>

Date of issue : 15/12/2016
Section 11. Toxicological information

**Conclusion/Summary**

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

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

**Mutagenicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Experiment</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>quaternary ammonium</td>
<td>OECD 471 - Bacterial Reverse Mutation</td>
<td>Experiment: In vitro</td>
<td>Negative</td>
</tr>
<tr>
<td>compounds, benzyl-</td>
<td>Test</td>
<td>Subject: Bacteria</td>
<td></td>
</tr>
<tr>
<td>C8-18-alkyldimethyl,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>chlorides</td>
<td>OECD 473 - Mammalian Chromosomal</td>
<td>Experiment: In vitro</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Aberration Test</td>
<td>Subject: Mammalian-Animal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OECD 476 - Mammalian Cell Gene Mutation</td>
<td>Experiment: In vitro</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Test</td>
<td>Subject: Mammalian-Animal</td>
<td></td>
</tr>
</tbody>
</table>

**Conclusion/Summary**

**Carcinogenicity**
- Not available.

**Conclusion/Summary**

**Reproductive toxicity**
- Not available.

**Conclusion/Summary**

**Teratogenicity**
- Not available.

**Conclusion/Summary**

**Specific target organ toxicity (single exposure)**
- Not available.

**Specific target organ toxicity (repeated exposure)**
- Not available.

**Aspiration hazard**
- Not available.

**Information on likely routes of exposure**
- Not available.

**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.

**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

**Date of issue**
- 15/12/2016
Section 11. Toxicological information

**Ingestion**: No specific data.

**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.

**Long term exposure**

- **Potential immediate effects**: Not available.
- **Potential delayed effects**: Not available.

**Potential chronic health effects**

Not available.

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

**General**: No known significant effects or critical hazards.

**Carcinogenicity**: No known significant effects or critical hazards.

**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.

**Fertility effects**: No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>22933.3 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>73333.3 mg/kg</td>
</tr>
</tbody>
</table>

**Section 12. Ecological information**

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides</td>
<td>Acute EC50 0.016 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 64 ppb Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic EC10 0.009 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

**Bioaccumulative potential**

Not available.

**Date of issue**: 15/12/2016
Section 12. Ecological information

**Mobility in soil**

Soil/water partition coefficient (K_{OC}) : Not available.

**Other adverse effects**

No known significant effects or critical hazards.

Section 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

<table>
<thead>
<tr>
<th>Regulation</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADG</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

PG* : Packing group

**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.

Section 15. Regulatory information

**Standard Uniform Schedule of Medicine and Poisons**

Not scheduled

**Model Work Health and Safety Regulations - Scheduled Substances**

No listed substance

Australia inventory (AICS) : All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.

HSNO Group Standard : Cleaning Products (Subsidiary hazard)

HSNO Approval Number : HSR002530

Approved Handler Requirement : No.

Tracking Requirement : No.

Date of issue : 15/12/2016
### Section 16. Any other relevant information

**Key to abbreviations**
- ADG = Australian Dangerous Goods
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- NOHSC = National Occupational Health and Safety Commission
- SUSMP = Standard Uniform Schedule of Medicine and Poisons
- UN = United Nations

**Date of issue / Date of revision**: 15/12/2016

**Revision comments**: Revision & update of the SDS.

**Version**: 15.2

#### Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIN CORROSION/IRRITATION - Category 2</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

**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 above-named 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.