

# SAFETY DATA SHEET



HEALTH • HYGIENE • HOME

## 1. Identification of the material and supplier

### Names

**Product name** : Pine O Cleen Multi Purpose Cleaner with Vinegar (3in1)

**SDS no.** : D0319281 v8.1

**Formulation #** : 8281421 v1.0

**Supplier** : AUSTRALIA  
RB (Hygiene Home) Australia Pty Limited  
ABN: 58 629 549 506  
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

**Material uses** : Surface Care

**Product use** : Consumer

## Section 2. Hazard(s) identification

**Classification of the substance or mixture** : CORROSIVE TO METALS - Category 1  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

**HSNO Classification** : 8.1A, 6.3A, 6.4A

### GHS label elements

**Hazard pictograms** :



**Signal word** : **WARNING**

**Hazard statements** : **May be corrosive to metals.**  
**Causes serious eye irritation.**  
**Causes skin irritation.**

### Precautionary statements

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

## Section 2. Hazard(s) identification

- Prevention** : Do not breathe spray.  
Do not get in eyes, on skin, or on clothing.
- Response** : IF ON SKIN: Wash with plenty of soap and water.  
If skin irritation occurs: Get medical advice/ attention.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Storage** : Store in corrosive resistant container with a resistant inner liner.
- Disposal** : Dispose of contents/container in accordance with local / regional / national / international regulations
- Supplemental label elements** : **Ingredient Declaration:**  
Per 100g liquid contains 1.5g Formic Acid, 3g Sulfamic Acid  
Contains less than 5% Nonionic surfactants  
Disinfectant  
Parfum  
If you have sensitive skin, we recommend you to wear gloves
- Other hazards which do not result in classification** : None

## Section 3. Composition and ingredient information

**Substance/mixture** : Mixture

Ingredient name	% (w/w)	CAS number
Formic Acid	<3	64-18-6
Sulfamic Acid	<5	5329-14-6

**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. 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. 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.

## Section 4. First aid measures

### 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.
- 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.

### 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** : 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** : In a fire, hazardous decomposition products may be produced.

**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** : 2X

## 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 spilled 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 spilled 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).

### 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. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. 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 spilled 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. Absorb spillage to prevent material damage.
- 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. Store in corrosive resistant container with a resistant inner liner. 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

Ingredient name	Exposure limits
Formic acid	<b>Safe Work Australia (Australia, 1/2014).</b> STEL: 19 mg/m <sup>3</sup> 15 minutes. STEL: 10 ppm 15 minutes. TWA: 9.4 mg/m <sup>3</sup> 8 hours. TWA: 5 ppm 8 hours.

#### New Zealand

Ingredient name	Exposure limits
formic acid	<b>NZ OSH (New Zealand, 2/2013).</b> WES-TWA: 5 ppm 8 hours. WES-TWA: 9.4 mg/m <sup>3</sup> 8 hours. WES-STEL: 19 mg/m <sup>3</sup> 15 minutes. WES-STEL: 10 ppm 15 minutes.

- 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

- 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.
Colour	: Clear.
Odour	: Not available.
Odour threshold	: Not available.
pH	: 0.8 to 1.3[Conc. (% w/w): 100%] [20°C]
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	: 1.015 to 1.035
Solubility	: Easily soluble in the following materials: cold water and hot water.
Solubility in water	: Easily soluble in the following materials: Cold water and hot water.
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.
Acidic. Test [g NaOH/100g Product]	: 2.24

## 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	: Reactive or incompatible with the following materials: metals
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

Product/ingredient name	Result	Species	Dose	Exposure
Formic acid.	LC50 Inhalation Vapour	Rat	7400 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	730 mg/kg	-

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

## Section 11. Toxicological information

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Formic acid.	Eyes - Severe irritant	Rabbit	-	122 milligrams	-
	Skin - Mild irritant	Rabbit	-	610 milligrams	-

### Conclusion/Summary

- Skin** : Based on Calculation method: Irritating to skin.  
**Eyes** : Based on Calculation method: Causes serious eye irritation.  
**Respiratory** : Based on available data, the classification criteria are not met.

### Sensitisation

Not available.

### 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

Not available.

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

### Carcinogenicity

Not available.

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

### Reproductive toxicity

Not available.

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

### Teratogenicity

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 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

## Section 11. Toxicological information

- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- 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

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Formic acid.	Acute EC50 151200 µg/l Fresh water	Daphnia - Daphnia magna - Larvae	48 hours
	Acute LC50 80000 to 90000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours

### Persistence and degradability

- Conclusion/Summary** : The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Formic acid	-2.3	-	low



## 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.

Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

## 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 spill material and runoff and contact with soil, waterways, drains and sewers.

## 14. Transport information

Regulation	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADG</b>	UN1760	CORROSIVE LIQUID, N.O. S. (sulphamidic acid, formic acid)	8	III		<b>Hazchem code</b> 2X  <b>Special provisions</b> 223, 274
<b>IMDG</b>	UN1760	CORROSIVE LIQUID, N.O. S. (sulphamidic acid, formic acid)	8	III		<b>Emergency schedules (EmS)</b> F-A, S-B  <b>Special provisions</b> 223, 274
<b>IATA</b>	UN1760	Corrosive liquid, n.o.s. (sulphamidic acid, formic acid)	8	III		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 5 L Packaging instructions: 852 <b>Cargo Aircraft Only</b> Quantity limitation: 60 L Packaging instructions: 856 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 1 L Packaging instructions: Y841  <b>Special provisions</b> A3, A803

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

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

Formic acid, Sulfamic acid

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

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

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## 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
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- NOHSC = National Occupational Health and Safety Commission
- SUSMP = Standard Uniform Schedule of Medicine and Poisons
- UN = United Nations

**Date of issue / Date of revision** : 11/09/2018

**Revision comments** : Update of the SDS.

**Version** : 8.1

### Procedure used to derive the classification

Classification	Justification
CORROSIVE TO METALS - Category 1	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	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 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.