SAFETY DATA SHEET



1. Identification

Product name : Finish Rinse Aid 0%

SDS no. : D8094028
Formulation # : FF8090357
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 : Detergent for use in domestic automatic dishwashers

2. Hazard identification

Classification of the substance or mixture

: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

-

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 11%

GHS label elements
Hazard pictograms





Signal word : DANGER

Hazard statements : Causes serious eye irritation.

Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

General : Keep out of reach of children. If medical advice is needed, have product container

or label at hand.

Prevention: Wear eye or face protection. Avoid contact with skin and eyes.

Response : Do not Swallow. If swallowed, do not induce vomiting, give 2 glasses of water to

drink. In case of contact with eyes or skin, rinse immediately with plenty of water. If

eye irritation persists: Get medical advice.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

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3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	≥10 - <25	120313-48-6
1,2,3-Propanetricarboxylic acid, 2-hydroxy-	≤3	77-92-9

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 following exposure or if feeling unwell. 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 following exposure or if feeling unwell. 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 following exposure or if feeling unwell. 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
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 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: No specific data.Ingestion: No specific data.

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

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4. First-aid measures

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)

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

: No specific fire or explosion hazard.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides

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, 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).

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.

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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 breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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

Control parameters

Australia

Occupational exposure limits

Ingredient name	Exposure limits
1,2,3-Propanetricarboxylic acid, 2-hydroxy-	DFG MAC-values list (Germany, 10/2021). PEAK: 4 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction TWA: 2 mg/m³ 8 hours. Form: inhalable fraction

New Zealand

Occupational exposure limits

No exposure standard allocated.

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.

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8. Exposure controls/personal protection

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

: 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.

Physical and chemical properties

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

Appearance

Physical state : Liquid.

Colour : Colourless.

Odour : sligthly chemical

Odour threshold : Not available.

pH : 3 [Conc. (% w/w): 100%]

Melting point/freezing point Boiling point, initial boiling : <0°C (<32°F) : >100°C (>212°F)

point, and boiling range

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

Evaporation rate : Not available.
Flammability : Not available.
Lower and upper explosion : Not available.

limit/flammability limit

Vapour pressure: Not available.Relative vapour density: Not available.Relative density: Not available.

Density : 1.01 to 1.02 g/cm³ [20°C (68°F)]

Solubility(ies) :

Media	Result
cold water hot water	Easily soluble Easily soluble

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9. Physical and chemical properties

Partition coefficient: n-

octanol/water

Viscosity

: Not applicable.

Auto-ignition temperature
Decomposition temperature

: Not available.: Not available.: 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
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	LD50 Oral	Rat	>2000 mg/kg	-
Citric acid	LD50 Oral	Rat	11700 mg/kg	-

Conclusion/Summary

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2,3-Propanetricarboxylic	Eyes - Severe irritant	Rabbit	-	24 hours 750	-
acid, 2-hydroxy-				ug	

Conclusion/Summary

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

Eyes Calculation method Causes serious eye irritation.

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

Sensitisation

Not available.

Conclusion/Summary

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

Germ Cell Mutagenicity

Not available.

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

Carcinogenicity

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11. Toxicological information

Not available.

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

Reproductive toxicity

Not available.

Conclusion/SummaryBased 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)

Name		Route of exposure	Target organs
1,2,3-Propanetricarboxylic acid, 2-hydroxy-	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Category 1	-	-

Aspiration hazard

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.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: No specific data.Ingestion: No specific data.

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

11. Toxicological information

Not available.

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

General: Causes damage to organs through prolonged or repeated exposure.

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
Oral Dermal	4545.45 mg/kg 10000 mg/kg
Demai	10000 mg/kg

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	Acute LC50 1.88 mg/l	Fish - Danio rerio	96 hours
Citric acid	Acute LC50 160000 μg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours

Conclusion/Summary

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

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	EU 301A Ready Biodegradability - DOC Die-Away Test EU 301B Ready Biodegradability - CO2 Evolution Test	96 % - Readily - 28 days 69 % - Readily - 28 days	-	-

Conclusion/Summary

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Alcohols, C12-15-branched and linear, ethoxylated propoxylated	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1,2,3-Propanetricarboxylic acid, 2-hydroxy-	-1.8	-	low

Mobility in soil

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12. Ecological information

Soil/water partition coefficient (Koc)

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

	ADG	ADR/RID	IMDG	IATA
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.

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.

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.

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16. Other 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

APVMA= Australian Pesticides and Veterinary Medicines Authority

TGA = Therapeutic Good Administration

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(Version for updated GHS Revision 7 PSDS Template)

Procedure used to derive the classification

Classification
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 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.

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