SAFETY DATA SHEET



1. Identification

Names

Product name: Finish Dishwasher Deep Cleaner Lemon

SDS no. : D8397386
Formulation # : FF3237624
Supplier : AUSTRALIA

RB (Hygiene Home) Australia Pty Ltd

ABN: 58 629 549 506

680 George Street, 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. Consumer use

2. Hazard identification

Classification of the substance or mixture

: SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms



Signal word : DANGER

Hazard statements : Causes skin irritation.

Causes serious eye damage.

Precautionary statements

General: Read carefully and follow all instructions. Keep out of reach of children. If medical

advice is needed, have product container or label at hand.

Prevention : Not applicable.

Response: Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse

cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Do

not ingest. If product is ingested then seek medical advice.

Storage : Not applicable.

Disposal : Not applicable.

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3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
1,2,3-Propanetricarboxylic acid, 2-hydroxy-	≥10 - ≤30	77-92-9
Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched	≤10	69011-36-5

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

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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

: Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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 damage.

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 watering redness

Inhalation : No specific data.

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4. First-aid measures

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion: Adverse symptoms may include the following:

stomach pains

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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

rom the chemical
Hazardous thermal

decomposition products

: No specific fire or explosion hazard.

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide

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. Do not breathe 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).

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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). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. 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 get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. 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.

including any incompatibilities

Conditions for safe storage, : Do not store above the following temperature: 40°C (104°F). 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 locked up. Separate from alkalis. 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.

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8. Exposure controls/personal protection

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.

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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.

Appearance

Physical state : Liquid.

Colour : Yellow / Colourless.

Odour : not available
Odour threshold : Not available

pH : 1.4 to 1.5 [Conc. (% w/w): 100%]

Melting point/freezing point : Not available.

Boiling point, initial boiling : <100°C (<212°F)

point, and boiling range

Flash point : Not available.

Evaporation rate : not available

Flammability : not available

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9. Physical and chemical properties

Lower and upper explosion

limit/flammability limit

: not available

Vapour pressure Not available. : not available Relative vapour density **Relative density** : not available 1.07 to 1.08 g/cm³ **Density**

Solubility(ies)

Media	Result
cold water hot water	Easily soluble Easily soluble

Partition coefficient: n-

octanol/water

: not available

Auto-ignition temperature Decomposition temperature Viscosity : 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

: Attacks many metals producing extremely flammable hydrogen gas which can form

explosive mixtures with air.

Reactive or incompatible with the following materials:

alkalis

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
1,2,3-Propanetricarboxylic acid, 2-hydroxy-	LD50 Oral	Rat	11700 mg/kg	-
Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega- hydroxy-, branched	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary

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

Irritation/Corrosion

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11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
FIL,FINSH DWC LEMON	Skin - Irritant	In vitro	-	-	-
	Eyes - Severe irritant	In vitro	-	-	-
1,2,3-Propanetricarboxylic	Eyes - Severe irritant	Rabbit	-	24 hours 750	-
acid, 2-hydroxy-				ug	
Isotridecanol, ethoxylated	Eyes - Moderate irritant	Rabbit	-	72 hours 0.1	21 days
				mL	

Conclusion/Summary

Skin On the basis of the test data: Causes skin irritation.

EyesOn the basis of the test data: Causes serious eye damage. **Respiratory**Based on available data, the classification criteria are not met.

<u>Sensitisation</u>

Not available.

Conclusion/Summary

SkinBased on available data, the classification criteria are not met.RespiratoryBased on available data, the classification criteria are not met.

Germ Cell 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)

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

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : No

of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

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11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

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

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

Numerical measures of toxicity

Acute toxicity estimates

Not available.

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
acid, 2-hydroxy-	Acute LC50 160000 μg/l Marine water Chronic NOEC 1.73 mg/l	Crustaceans - Carcinus maenas - Adult Fish	48 hours

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

Persistence and degradability

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12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega- hydroxy-, branched	EU 301B Ready Biodegradability - CO2 Evolution Test	>60 % - Readily - 28 days	-	-
	EU 311 Anaerobic Biodegradation of Organic Compounds in Digested Sludge - Method by Measurement of Gas Production	>60 % - 60 days	-	-

Conclusion/Summary

No additional remark.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega- hydroxy-, branched	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
acid, 2-hydroxy-	-1.8	-	low
Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega- hydroxy-, branched	-	232.5	low

Mobility in soil

Soil/water partition coefficient (Koc)

: 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.

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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

to IMO instruments

: Not available.

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

No.

Requirement

No.

Tracking Requirement 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 = Intermediate 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

Date of issue / Date of

revision

22/12/2022

Version : 1

(Version for updated GHS Revision 7 PSDS Template)

Procedure used to derive the classification

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16. Other information

Classification	Justification
	Expert judgment Expert judgment

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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