

SAFETY DATA SHEET



1. Identification

Product name : Finish In-Wash Dishwasher Cleaner Tabs
SDS no. : D8374373
Formulation # : FF3128903
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

Uses

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

GHS label elements

Hazard pictograms :



Signal word : **WARNING**

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

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. Wash hands thoroughly after handling.
Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
Storage : Not applicable.
Disposal : Not applicable.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Carbonic acid, disodium salt	≥30 - ≤60	497-19-8
Subtilisin	≤ 0.3	9014-01-1

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

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

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

4. First-aid measures

Description of necessary first aid measures

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

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- Skin contact** : No known significant effects or critical hazards.
- 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** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

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 dry chemical powder.
- Unsuitable extinguishing media** : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

Specific hazards arising from the chemical : May form explosible dust-air mixture if dispersed.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
halogenated compounds
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. 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** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

6. Accidental release measures

- Large spill** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. 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** : Do not store above the following temperature: 40°C (104°F). Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidising materials. 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.

- Do not store above the following temperature** : Daily average of 40°C

8. Exposure controls/personal protection

Control parameters

Australia

Occupational exposure limits

No exposure standard allocated.

New Zealand

Occupational exposure limits

8. Exposure controls/personal protection

Ingredient name	Exposure limits
subtilisin	NZ HSWA 2015 - GRWM 2016 (New Zealand, 11/2020). [Subtilisins] Absorbed through skin. Inhalation sensitiser. WES-Ceiling: 0.00006 mg/m ³ , (measured as 100% pure crystalline enzyme)

Appropriate engineering controls : Use only with adequate ventilation. 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. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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. If operating conditions cause high dust concentrations to be produced, use dust 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.

9. Physical and chemical properties

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

Appearance

Physical state : Solid. [Powder.wrapped in PVOH foil with Bitrex®]

Colour : White. Pink. Blue. Green.

Odour : Not available.
Not available.

9. Physical and chemical properties

Odour threshold	:	
pH	:	10.5 to 10.9 [Conc. (% w/w): 10%]
Melting point/freezing point	:	Not available.
Boiling point, initial boiling point, and boiling range	:	Not available.
Flash point	:	Not applicable.
Evaporation rate	:	Not available.
Flammability	:	Not available.
Lower and upper explosion limit/flammability limit	:	Not applicable.
Vapour pressure	:	Not available.
Relative vapour density	:	Not applicable.
Relative density	:	Not available.
Solubility(ies)	:	

Media	Result
cold water	Easily soluble
hot water	Easily soluble

Partition coefficient: n-octanol/water	:	Not applicable.
Auto-ignition temperature	:	Not applicable.
Decomposition temperature	:	Not available.
Viscosity	:	Not applicable.
<u>Particle characteristics</u>		
Median particle size	:	Not available.

10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.
Incompatible materials	:	Reactive or incompatible with the following materials: oxidising materials
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
subtilisin sodium carbonate	LD50 Oral	Rat	3700 mg/kg	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	2800 mg/kg	-

Conclusion/Summary

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
subtilisin sodium carbonate	Eyes - Moderate irritant	Rabbit	-	3 milligrams	-
	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-

Conclusion/Summary

Skin

Non-irritant to skin.

Eyes

Calculation method Irritating to eyes.

Respiratory

The product is neither irritant by inhalation nor a respiratory sensitizer.

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.

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)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

11. Toxicological information

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.
- 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** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- 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 effects** : Not available.
- Potential delayed effects** : Not available.
- 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** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- 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	3500 mg/kg

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
subtilisin	Acute EC50 23.78 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
sodium carbonate	Acute EC50 242000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute LC50 176000 µg/l Fresh water	Crustaceans - Amphipoda	48 hours
	Acute LC50 265000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Alcohols, C16-18, ethoxylated	OECD 303A 303A Simulation Test - Aerobic Sewage Treatment - Activated Sludge Units	90 % - Readily - 28 days	-	-
	OECD 301B28 301B Ready Biodegradability - CO2 Evolution Test	>60 % - Readily - 28 days	-	-

Conclusion/Summary

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Alcohols, C16-18, ethoxylated	-	-	Readily

Bioaccumulative potential

Not available.

Mobility in soil

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

Other adverse effects : No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods

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

14. Transport information

	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 Requirement : Not applicable.

Tracking Requirement : Not applicable.

16. Other information

Key to abbreviations :

- ADG = Australian Dangerous Goods
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- IATA = International Air Transport Association
- IMDG = International Maritime Dangerous Goods
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IBC = 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 : 26/05/2023

Version : 2
(Version for updated GHS Revision 7 PSDS Template)

Procedure used to derive the classification

Date of issue : 26/05/2023

16. Other information

Classification	Justification
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.