

1 Product and Company Identification

Product Name	FINISH® POWERBALL® Tabs - All Scents	
CAS #	Mixture	
	This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the Canadian Workplace Hazardous Materials Information System (WHMIS). This MSDS is not applicable for consumer use o our products. For consumer use, all precautionary and first aid language is provided or the product label in accordance with the applicable government regulation.	
Product Use	Dishwasher detergent	
Distributed by	Reckitt Benckiser (Canada) Inc. 1680 Tech Avenue Unit #2 Mississauga, ON L4W 5S9 In Case of Emergency: 1-800-338-6167 Transportation Emergencies: 24 Hour Number: North America: CHEMTREC: 1-800-424-9300 Outside North America: 1-703-527-3887	
LEGEND HMIS/NFPA	Health * 2	
Severe 4	Flammability 0	
Serious 3	Physical Hazard 0	
Moderate 2 Slight 1		
Minimal 0	Personal Protection B	
	2. Hazards Identification	
Emergency Overview	CAUTION HARMFUL IF SWALLOWED. EYE IRRITANT. Do not ingest. DO NOT get in eyes.	
	NOTICE: PRODUCT MAY POSE A CHOKING HAZARD TO CHILDREN UNDER 3 YEARS OF AGE.	
	Keep out of reach of children.	
Potential short term health effects		
Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.	
Eyes Irritating to eyes.		
Skin	Slightly irritating to the skin. Not expected to be a skin sensitizer.	

Inhalation

Ingestion Target organs Chronic effects Signs and symptoms Potential environmental effects Exposure to decomposition products may cause a health hazard.

The finished product is not expected to have chronic health effects.

Components of this product have been identified as having potential

Symptoms may include redness, oedema, drying, defatting and cracking of the skin.

Serious effects may be delayed following exposure.

Harmful if swallowed.

environmental concerns.

Skin. Eyes.

3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
A-Amylase (EC# 3.2.1.1)	9000-90-2	< 0.1
Subtilisin carlsburg	9014-01-1	< 1
Alanine, Ú,Ú-bis(carboxymethyl)-, trisodium salt	164462-16-2	1 - 5
Sodium percarbonate	15630-89-4	10 - 30
Sodium carbonate	497-19-8	15 - 40

T. I IISt Ald Measures		
First aid procedures		
Eye contact	If in eyes, IMMEDIATELY rinse eyes with water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. If irritation persists, get medical attention.	
Skin contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.	
Inhalation	Move to fresh air.	
Ingestion	If swallowed, rinse mouth and drink a glass of water. DO NOT induce vomiting. Call a physician or Poison Control Center IMMEDIATELY.	
Notes to physician	Treat patient symptomatically.	
General advice	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.	

4. First Aid Measures

5. Fire-fighting Measures

Flammable properties	Not flammable by WHMIS criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighers	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of sulphur. Oxides of nitrogen.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Ensure adequate ventilation. Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters. Advise authorities if product has penetrated drains, sewers or water pipes.
Methods for containment	Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage		
Handling	Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Do not ingest. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product. Notice: Product may pose a choking hazard to children under 3 years of age.	
Storage	Keep out of reach of children. Store in a closed container away from incompatible materials. Keep container tightly closed in a dry and well-ventilated place. Keep in properly labelled containers. Store between 5°C and 30°C. Avoid storage under direct sunlight. Store upright to prevent product leakage.	

8. Exposure Controls / Personal Protection

Exposure limit values		
Ingredient(s)	Exposure limit values	
A-Amylase (EC# 3.2.1.1)	ACGIH-TLV	
	Not established	
Alanine, Ú,Ú-bis(carboxymethyl)-, trisoc	dium salt ACGIH-TLV	
	Not established	
Sodium carbonate	ACGIH-TLV	
	Not established	
Sodium percarbonate	ACGIH-TLV	
	Not established	
Subtilisin carlsburg	ACGIH-TLV	
	Ceiling: 0.0001 mg/m3	
Engineering controls	General ventilation normally adequate.	
	Consult the product label for special protection or precautions that have been identified for using this product under directed consumer use conditions. The following recommendations are given for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure.	
Eye / face protection	Wear safety glasses with side shields. Emergency responders should wear full eye and face protection.	
Hand protection	Rubber gloves. Confirm with a reputable supplier first. Emergency responders should wear impermeable gloves.	
Skin and body protection	Usual safety precautions while handling the product will provide adequate protection against injury or irritation. Follow label directions carefully. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.	
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.	

9. Physical and Chemical Properties

Appearance	Tablet
Colour	White / Blue / Red

Form	Solid.
Odour	Various
Odour threshold	Not available
Physical state	Solid
рН	9.5 - 10.0 (10%)
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation Rate	Not available
Flash point	> 100 °C (> 212.00 °F) TOC
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not applicable
Flammability Limits in Air, Upper, % by Volume	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H2O)	Soluble

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents. This product may react with strong acids.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Do not mix with chlorine bleach. Keep away from extreme heat. Exposure to moisture. Do not freeze
Incompatible materials	Oxidizers. Acids.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of sulphur. Oxides of nitrogen.

11. Toxicological Information

Component analysis - LC50			
Ingredient(s)		LC50	
A-Amylase (EC# 3.2.1.1)		Not available	
Alanine, Ú,Ú-bis(carboxymethy	l)-, trisodium salt	Not available	
Sodium carbonate		400 mg/m3 guinea pig	
Sodium percarbonate		Not available	
Subtilisin carlsburg		Not available	
Component analysis - Oral LD50			
Ingredient(s)		LD50	
A-Amylase (EC# 3.2.1.1)		7500 mg/kg rat	
Alanine, Ú,Ú-bis(carboxymethy	rl)-, trisodium salt	2000 mg/kg rat	
Sodium carbonate		4090 mg/kg rat	
Sodium percarbonate		2200 mg/kg mouse; 1034 mg/kg rat	
Subtilisin carlsburg		Not available	
Effects of acute exposure			
Eye	Irritating to eyes.		

Skin	Slightly irritating to the skin. Not expected to be a skin sensitizer.
Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	Harmful if swallowed.
Sensitisation	The finished product is not expected to have chronic health effects.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	The finished product is not expected to have chronic health effects.
Mutagenicity	The finished product is not expected to have chronic health effects.
Reproductive effects	The finished product is not expected to have chronic health effects.
Teratogenicity	The finished product is not expected to have chronic health effects.
Name of Toxicologically Synergistic Products	Not available

12. Ecological Information

Ecotoxicity	See below					
Ecotoxicity - Freshwater Algae	- Acute Toxicity Dat	a				
Sodium carbonate Sodium percarbonate Ecotoxicity - Freshwater Fish -	497-19-8 15630-89-4 Acute Toxicity Data	120 Hr EC50 Nitzschia: 242 mg/L 240 Hr EC50 Chlorella emersonii: 70 mg/L				
Sodium carbonate	497-19-8	96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]; 96 Hr LC50 Pimephales promelas: 310 - 1220 mg/L [static]				
Sodium percarbonate Ecotoxicity - Water Flea - Acute	15630-89-4 Toxicity Data	96 Hr LC50 Pimephales promelas: 70.7 mg/L [static]				
Sodium carbonate Sodium percarbonate	497-19-8 15630-89-4	48 Hr EC50 Daphnia magna: 265 mg/L 48 Hr EC50 Daphnia pulex: 4.9 mg/L				
Persistence and degradability	Not available	9				
Bioaccumulation/accumulation	Not available					
Mobility in environmental media	Not available					
Environmental effects	Not available tition coefficient Not available					
Aquatic toxicity						
Partition coefficient						
Chemical fate information						
Other adverse effects	Not available	e				
13. Disposal Considerations						
Disposal instructions		accordance with all applicable regulations. ash or offer for recycling.				
Waste from residues / unused products	Not available	Not available				
Contaminated packaging	Not available	Not available				
	14 Transport Information					

14. Transport Information

UN/ID N.o.

Not applicable

U.S. Department of Transportation (DOT): Classification: Not regulated

Proper shipping name	Not applicable	
U.S. DOT Hazard Class	Not applicable	
Subsidiary Risk	Not applicable	
Packing group	Not applicable	
DOT RQ (lbs) ERG NO	Not applicable Not applicable	

Transportation of Dangerous Goods (TDG - Canada): Classification: Not regulated

Proper shipping nameNot applicableStatusNot applicablePacking groupNot applicable

IMDG (Marine Transport): Classification: Not regulated

Proper shipping name	Not applicable	
Class	Not applicable	
Subsidiary Risk	Not applicable	
Packing group	Not applicable	
IMDG Page	Not applicable	
Marine pollutant	Not applicable	
EMS	Not applicable	
MFAG	Not applicable	
Maximum Quantity	Not applicable	

IATA/ICAO (Air): Classificatio	on: Not regulated
Proper shipping name	Not applicable
Class	Not applicable
Subsidiary Risk:	Not applicable
Packing group	Not applicable
Maximum Quantity	Not applicable

	15. Regulatory Information			
Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.			
	Product Registration: Product is compliant with CCCR re registration is not required for this product.	egulatory guidelines; a specific		
Canada - WHMIS - Ingredient Di	sclosure List			
Sodium carbonate)7-19-8 1 %			
WHMIS classification	Exempt - Consumer product			
Inventory Status				
Country(s) or region	Inventory Name	On Inventory (Yes/No)*		
Canada	Domestic Substances List (DSL)	Yes		
Canada	Non-Domestic Substances List (NDSL) N			
A "Yes" indicates that all comp country(s)	ponents of this product comply with the inventory requirements	administered by the governing		
	16. Other Information			
Disclaimer	This product should only be used as directed on the label and for the purpose intended. 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.			
Further information	FINISH® POWERBALL® Tabs - Fresh - 8031925v1.0 FINISH® POWERBALL® Tabs - Green Apple - 8031927v1.0 FINISH® POWERBALL® Tabs - Orange - 8031926v1.0			
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Reckitt Benckiser Regulatory Department 800-333-3899

Prepared by For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document. **Other Information**