

1. Product and Company Identification

Product name FINISH® POWER & FREE™ Powerball Tabs

CAS # Mixture

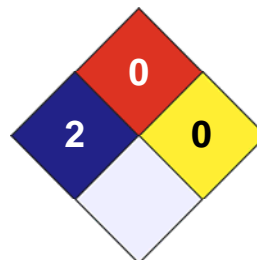
This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the U.S. Government's Occupational Safety and Health Administration (OSHA).
This MSDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulation.

Product Use Dishwasher detergent

Distributed by Reckitt Benckiser
Morris Corporate Center IV
399 Interpace Parkway
P.O. Box 225
Parsippany, NJ 07054-0225
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	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	* 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B



2. Hazards Identification

Emergency overview CAUTION
HARMFUL IF SWALLOWED.
EYE IRRITANT.
DO NOT ingest. Avoid eye contact.

NOTICE: PRODUCT MAY POSE A CHOKING HAZARD TO CHILDREN UNDER 3 YEARS OF AGE.
Keep the pack closed.

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.

Inhalation Exposure to decomposition products may cause a health hazard.
Serious effects may be delayed following exposure.

Ingestion Harmful if swallowed.

Target organs Skin. Eyes.

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

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.

OSHA regulatory status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects See section 12.

3. Composition/Information on Ingredients

Components	CAS #	Percent
Sodium carbonate	497-19-8	20 - 40
Methyl glycine diacetic acid, trisodium salt	164462-16-2	2.5 - 10
Sodium percarbonate	15630-89-4	2.5 - 10
Subtilisin carlsburg	9014-01-1	<1
a-Amylase (EC# 3.2.1.1)	9000-90-2	<0.1

4. First Aid 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 contaminated skin with soap and water. Get medical attention if symptoms occur.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.
Ingestion	If swallowed, call a Poison Control Center or doctor immediately. Have person drink a glass of water if able to swallow. Do not give anything to an unconscious person. DO NOT induce vomiting.

Notes to physician

General advice	Treat patient symptomatically. 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.
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5. Fire Fighting Measures

Flammable properties	Not flammable by OSHA 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 and precautions for firefighters	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 sulfur. Oxides of nitrogen. Metal oxides.
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. Stop leak if you can do so without risk.

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. Never return spills to original containers for re-use.

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.
Do not expose to temperatures exceeding 40°C.
Avoid storage under direct sunlight.

8. Exposure Controls/Personal Protection

Occupational exposure limits**US. ACGIH Threshold Limit Values****Components****Type****Value**

Subtilisin carlsburg (CAS
9014-01-1)

Ceiling

0.00006 mg/m3

Exposure limits

Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.

Engineering controls

Ensure adequate ventilation.

Personal protective equipment

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 Safety glasses with side-shields or full eye & face protection should be worn if risk assessment indicates this is necessary for the workplace or emergency responders. Emergency responders should wear full eye and face protection.

Hand protection Chemical resistant, impervious gloves should be worn if risk assessment indicates this is necessary for the workplace or emergency responders. 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

Color

White / Blue / Red

Form

Solid.

Odor

Characteristic

Odor threshold

Not available.

Physical state

Solid.

pH	9.5 (10%)
Freezing point	Not available.
Boiling point	Not available.
Pour point	Not available.
Evaporation rate	Not available
Flash point	> 212.00 °F (> 100.00 °C) Tag Open Cup
Auto-ignition temperature	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Solubility (water)	Soluble
Relative density	Not available.
Viscosity	Not available.
VOC	Not available
Percent volatile	Not available

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 polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	DO NOT MIX WITH BLEACH or use in conjunction with other household products. 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 sulfur. Oxides of nitrogen. Metal oxides.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
a-Amylase (EC# 3.2.1.1) (CAS 9000-90-2)		
Acute		
<i>Oral</i>		
LD50	Rat	>= 7500 mg/kg
LC50		
Not available.		
Methyl glycine diacetic acid, trisodium salt (CAS 164462-16-2)		
Acute		
<i>Dermal</i>		
LD50	Rat	>= 2000 mg/kg
<i>Oral</i>		
LD50	Rat	>= 2000 mg/kg
LC50		
Not available.		

Components	Species	Test Results
Sodium carbonate (CAS 497-19-8)		
Acute		
<i>Inhalation</i>		
LC50	Guinea pig	400 mg/m3
		0.8 mg/l, 2 Hours
	Mouse	1.2 mg/l, 2 Hours
	Rat	2.3 mg/l, 2 Hours
<i>Oral</i>		
LD50	Rat	4090 mg/kg
Sodium percarbonate (CAS 15630-89-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
<i>Oral</i>		
LD50	Mouse	2200 mg/kg
	Rat	1034 mg/kg
LC50		
Not available.		
Subtilisin carlsburg (CAS 9014-01-1)		
LC50		
Not available.		
LD50		
Not available.		

Effects of acute exposure

Eye contact	Irritating to eyes.
Skin contact	Slightly irritating to the skin.
Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	Harmful if swallowed.
Sensitization	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

Ecotoxicological data

Components	Species	Test Results
Sodium carbonate (CAS 497-19-8)		
Crustacea	EC50	Daphnia
		265 mg/L, 48 Hours
		Water flea (Ceriodaphnia dubia)
		156.6 - 298.9 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)
		300 mg/l, 96 hours

Components	Species	Test Results
Sodium percarbonate (CAS 15630-89-4)		
Crustacea	EC50	Daphnia
		4.9 mg/L, 48 Hours
Persistence and degradability	Not available.	
Bioaccumulation / Accumulation	Not available	
Mobility in environmental media	Not available	
Environmental effects	Not available.	
Aquatic toxicity	Not available.	
Chemical fate information	Not available.	

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations. Do not re-use empty containers. Empty container can be disposed of as household trash or rinsed and recycled.
Waste from residues / unused products	Not available
Contaminated packaging	Not available.

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)	Not applicable
ERG NO	Not applicable
Transportation of Dangerous Goods (TDG - Canada): Classification:	Not regulated
Proper shipping name	Not applicable
Status	Not applicable
Packing group	Not 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): Classification:	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

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200
hazardous chemical Yes

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Product Registration: Product is compliant with CPSC regulatory guidelines; a specific registration is not required for this product.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

State regulations This product is not subject to warning labeling under the California Proposition 65 regulation.

US - California Hazardous Substances (Director's): Listed substance

Subtilisin carlsburg (CAS 9014-01-1) Listed.

US - Texas Effects Screening Levels: Listed substance

Sodium carbonate (CAS 497-19-8) Listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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® POWER & FREE™ Powerball Tabs - 8060900v1.0

Issue date

19-September-2013

Effective date

15-September-2013

Prepared by

Reckitt Benckiser Regulatory Department Phone: 800-333-3899

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.