1. Product and Company Identification

Product Name: FINISH® Powder
UPC CODES: Refer to section 16
CAS #: Mixture
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: 1-800-228-4722
Transportation Emergencies: 24 Hour Number:
North America: CHEMTREC: 1-800-424-9300
Outside North America: 1-703-527-3887

2. Hazards Identification

Emergency overview
WARNING
HARMFUL IF SWALLOWED.
EYE IRRITANT.
DO NOT ingest.
DO NOT get in eyes.
Contains Sodium Carbonate, Sodium Carbonate Peroxhydrate and enzymes.
KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects
Routes of exposure: Eye, Skin contact, Inhalation, Ingestion.
Eyes: Irritating to eyes.
Skin: None expected during normal conditions of use.
Not expected to be a skin sensitizer.
Inhalation: May cause mild nasal irritation upon prolonged or repeated contact to the dust in occupational or emergency response situation.
Ingestion: Harmful if swallowed. Ingestion could cause irritation of the mouth and throat. Will cause burning in mouth and throat. Difficulty swallowing, excessive salivating in infants. Reddening and swelling of mucous membranes of mouth and throat.
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.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Silicic acid, sodium salt</td>
<td>1344-09-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Sodium percarbonate</td>
<td>15630-89-4</td>
<td>&lt; 2.5</td>
</tr>
<tr>
<td>Subtilisin carlsburg</td>
<td>9014-01-1</td>
<td>&lt; 0.01</td>
</tr>
</tbody>
</table>
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 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. Call a physician or Poison Control Centre.

**Notes to physician**
Contains Sodium Carbonate, Sodium Carbonate Peroxhydrate and enzymes. 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.

5. Fire Fighting Measures

**Flammable properties**
Not flammable by OSHA criteria.

**Extinguishing media**

| Suitable extinguishing media | Not available |
| Unsuitable extinguishing media | Treat for surrounding material |

**Protection of firefighters**

| Specific hazards arising from the chemical | Not available |
| Protective equipment 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 sulphur.

**Explosion data**

| Sensitivity to mechanical impact | Not available |
| Sensitivity to static discharge | Not available |

6. Accidental Release Measures

**Personal precautions**
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.

**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**
Avoid contact with eyes.
Do not ingest.
Use good industrial hygiene practices in handling this material.
When using do not eat or drink.

**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.
8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid, sodium salt</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>Sodium percarbonate</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>Subtilisin carlsburg</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Ceiling: 0.0001 mg/m3</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
</tbody>
</table>

**Engineering controls**
General ventilation normally adequate.

**Personal protective equipment**

- **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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Powder</td>
</tr>
<tr>
<td>Color</td>
<td>White / Blue</td>
</tr>
<tr>
<td>Form</td>
<td>Solid</td>
</tr>
<tr>
<td>Odor</td>
<td>Perfume</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>pH</td>
<td>10.8 ± 0.2 (10%)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Pour point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Product does not flash</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.2</td>
</tr>
<tr>
<td>Octanol/water coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**10. Stability and Reactivity**

- **Chemical stability**: Stable under recommended storage conditions.
- **Conditions to avoid**: Do not mix with other chemicals. Do not mix with chlorine bleach.
- **Incompatible materials**: Oxidizers.
- **Hazardous decomposition products**: May include and are not limited to: Oxides of carbon. Oxides of sulphur.
- **Possibility of hazardous reactions**: Hazardous polymerization does not occur.

**11. Toxicological Information**

### Component analysis - LC50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid, sodium salt</td>
<td>Not available</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>400 mg/m3 guinea pig</td>
</tr>
<tr>
<td>Sodium percarbonate</td>
<td>Not available</td>
</tr>
<tr>
<td>Subtilisin carlsburg</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### Component analysis - Oral LD50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid, sodium salt</td>
<td>1153 mg/kg rat</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>4090 mg/kg rat</td>
</tr>
<tr>
<td>Sodium percarbonate</td>
<td>2200 mg/kg mouse; 1034 mg/kg rat</td>
</tr>
<tr>
<td>Subtilisin carlsburg</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Effects of acute exposure**

- **Eye**: Irritating to eyes.
- **Skin**: None expected during normal conditions of use. Not expected to be a skin sensitiser.
- **Inhalation**: May cause mild nasal irritation upon prolonged or repeated contact to the dust in occupational or emergency response situation.
- **Ingestion**: Harmful if swallowed. Ingestion could cause irritation of the mouth and throat. Will cause burning in mouth and throat. Difficulty swallowing, excessive salivating in infants. Reddening and swelling of mucous membranes of mouth and throat.

**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.

**Synergistic Materials**: Not available.
12. Ecological Information

Ecotoxicity

See below

**Ecotoxicity - Freshwater Algae Data**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>EC50 (Hr)</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>120</td>
<td>Nitzschia: 242 mg/L</td>
</tr>
<tr>
<td>Sodium percarbonate</td>
<td>15630-89-4</td>
<td>240</td>
<td>Chlorella emersonii: 70 mg/L</td>
</tr>
</tbody>
</table>

**Ecotoxicity - Freshwater Fish Species Data**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>LC50 (Hr)</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid, sodium salt</td>
<td>1344-09-8</td>
<td>96</td>
<td>Lepomis macrochirus: 301-478 mg/L</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td></td>
<td>Lepomis macrochirus: 300 mg/L [static]</td>
</tr>
<tr>
<td>Sodium percarbonate</td>
<td>15630-89-4</td>
<td></td>
<td>Pimephales promelas: 70.7 mg/L [static]</td>
</tr>
</tbody>
</table>

**Ecotoxicity - Water Flea Data**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>EC50 (Hr)</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicic acid, sodium salt</td>
<td>1344-09-8</td>
<td>48</td>
<td>Daphnia magna: 216 mg/L</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td></td>
<td>Daphnia magna: 265 mg/L</td>
</tr>
<tr>
<td>Sodium percarbonate</td>
<td>15630-89-4</td>
<td></td>
<td>Daphnia pulex: 4.9 mg/L</td>
</tr>
</tbody>
</table>

Environmental effects     Not available
Aquatic toxicity          Not available
Persistence / degradability Not available
Bioaccumulation / accumulation Not available
Partition coefficient     Not available
Mobility in environmental media Not available
Chemical fate information Not available

13. Disposal Considerations

Waste codes     Not available
Disposal instructions Dispose in accordance with all applicable regulations.
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

US Federal regulations:
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

Product Registration: Not registered

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200 hazardous chemical
Yes

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

**Section 302 extremely hazardous substance**
No

**Section 311 hazardous chemical**
Yes

**Clean Air Act (CAA)**
Not available

**Clean Water Act (CWA)**
Not available

**State regulations**
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**
Subtilisin carlsburg 9014-01-1 Present

**Inventory status**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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**
- 51700-79328 - 50 oz. - FINISH® Powder Lemon Fresh - 0237266
- 51700-78234 - 75 oz. - FINISH® Powder Lemon Fresh - 0237266
- 51700-79347 - 75 oz. - FINISH® Powder Orange Fresh - 0237266

**Issue date**
09-Apr-2010

**Effective date**
01-Apr-2010

**Prepared by**
Reckitt Benckiser Regulatory Department 800-333-3899

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