1. Product and Company Identification

Product Name: FINISH® GELPACS® - 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 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
HMIS/NFPA

<table>
<thead>
<tr>
<th>Severe</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious</td>
<td>3</td>
</tr>
<tr>
<td>Moderate</td>
<td>2</td>
</tr>
<tr>
<td>Slight</td>
<td>1</td>
</tr>
<tr>
<td>Minimal</td>
<td>0</td>
</tr>
</tbody>
</table>

2. Hazards Identification

Emergency overview
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
Slightly irritating to the eyes.

Skin
None expected during normal conditions of use.
Not expected to be a skin sensitizer.

Inhalation
None expected during normal conditions of use.

Ingestion
Health injuries are not known or expected under normal use.

Target organs
Eyes. Skin.

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

Signs and symptoms
None expected during normal conditions of use.

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

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formic acid, sodium salt</td>
<td>141-53-7</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Polyvinyl alcohol</td>
<td>9002-89-5</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Subtilisin carlsburg</td>
<td>9014-01-1</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>A-Amylase (EC# 3.2.1.1)</td>
<td>9000-90-2</td>
<td>0 - 0.1</td>
</tr>
</tbody>
</table>

4. First Aid Measures

**First aid procedures**

- **Eye contact**: If in eyes, IMMEDIATELY rinse eyes with plenty of water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. If irritation occurs, get medical attention. If content has been released, seek medical advice and show the container or label.
- **Skin contact**: Get medical attention immediately. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
- **Inhalation**: Move exposed person to fresh air. Get medical attention immediately.
- **Ingestion**: If swallowed, call a Poison Control Center or doctor immediately. DO NOT induce vomiting. Wash out mouth with water.

**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.

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 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 nitrogen. Oxides of sulfur. Metal oxides.

**Explosion data**

- **Sensitivity to mechanical impact**: Not available
- **Sensitivity to static discharge**: Not available

6. Accidental Release Measures

**Personal precautions**

- Avoid contact with skin and eyes. Use personal protective equipment. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unnecessary personnel away.

**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**

- Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

**Methods for cleaning up**

- Pick up and transfer to properly labelled containers.
### 7. Handling and Storage

**Handling**
- Ensure adequate ventilation.
- Hands must be dry before handling.
- Do not unwrap or cut GELPAC®.
- Avoid contact with eyes, skin and clothing.
- Do not ingest.
- When using, do not eat, drink or smoke.
- Notice: Product may pose a choking hazard to children under 3 years of age.
- Do not reuse the empty container.

**Storage**
- Keep out of reach of children.
- Keep in properly labelled containers.
- Keep containers tightly closed in a cool, well-ventilated place.
- Keep at temperatures below 50°C/122°F.
- Avoid storage under direct sunlight.

### 8. Exposure Controls / Personal Protection

**Exposure limits**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Amylase (EC# 3.2.1.1)</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>Formic acid, sodium salt</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>TWA: 10 mg/m3</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>TWA: 15 mg/m3</td>
</tr>
<tr>
<td>Polyvinyl alcohol</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>TWA: 10 mg/m3</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 mg/m3</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**
- 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**
  - tightly fitting safety goggles
  - Emergency responders should wear full eye and face protection.

- **Hand protection**
  - Follow standard industrial hygiene practices.
  - 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.
  - Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible. Follow label directions carefully.

- **Respiratory protection**
  - Not normally required if good ventilation is maintained.
  - 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**
  - Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.
9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Orange, Blue, Violet</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid gel in a soluble capsule</td>
</tr>
<tr>
<td>Odor</td>
<td>Various</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>9.1 - 9.9</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Pour point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 212.00 °F (&gt; 100 °C)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not available</td>
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<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
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<tr>
<td>Specific gravity</td>
<td>Not available</td>
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<tr>
<td>Octanol/water coefficient</td>
<td>Not available</td>
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<tr>
<td>Solubility (H2O)</td>
<td>Complete</td>
</tr>
<tr>
<td>Viscosity</td>
<td>2000 - 2400 mPas (2000 - 2400 cP)</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>This product may react with strong oxidizing agents.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Hazardous polymerization does not occur.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Do not use with other detergents. Do not mix with chlorine bleach. Protect from sunlight and do not expose to temperatures exceeding 50°C (120°F). Exposure to moisture. Keep from freezing. Caustics. Acids.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Caustics. Acids.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Some metallic oxides.</td>
</tr>
</tbody>
</table>

11. Toxicological Information

<table>
<thead>
<tr>
<th>Component analysis - LC50 Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Amylase (EC# 3.2.1.1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Formic acid, sodium salt</td>
<td>Not available</td>
</tr>
<tr>
<td>Polyvinyl alcohol</td>
<td>Not available</td>
</tr>
<tr>
<td>Subtilisin carlsburg</td>
<td>Not available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component analysis - Oral LD50 Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-Amylase (EC# 3.2.1.1)</td>
<td>7500 mg/kg rat</td>
</tr>
<tr>
<td>Formic acid, sodium salt</td>
<td>4000 mg/kg dog</td>
</tr>
<tr>
<td>Polyvinyl alcohol</td>
<td>20000 mg/kg rat</td>
</tr>
<tr>
<td>Subtilisin carlsburg</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Effects of acute exposure

Eye
Slightly irritating to the eyes.

Skin
None expected during normal conditions of use. Not expected to be a skin sensitizer.

Inhalation
None expected during normal conditions of use.

Ingestion
Health injuries are not known or expected under normal use.

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

Ecotoxicity - Freshwater Fish - Acute Toxicity Data
Formic acid, sodium salt 141-53-7 24 Hr LC50 Lepomis macrochirus: 5000 mg/L

Ecotoxicity - Water Flea - Acute Toxicity Data
Formic acid, sodium salt 141-53-7 24 Hr EC50 Daphnia magna: >1000 mg/L

Persistence / degradability
Not available

Bioaccumulation / accumulation
Not available

Mobility in environmental media
Not available

Environmental effects
Not available

Aquatic toxicity
Not available

Partition coefficient
Not available

Chemical fate information
Not available

13. Disposal Considerations

Disposal instructions
Discard after single use.
Review federal, state/provincial, and local government requirements prior to disposal.
Discard with solid waste.
Empty container can be discarded in the trash or recycled where appropriate.

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

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not applicable</th>
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<tbody>
<tr>
<td>Status</td>
<td>Not applicable</td>
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<tr>
<td>Packing group</td>
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</tbody>
</table>

IMDG (Marine Transport): Classification: Not regulated

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Subsidiary Risk</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not applicable</td>
</tr>
<tr>
<td>IMDG Page</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Not applicable</td>
</tr>
<tr>
<td>EMS</td>
<td>Not applicable</td>
</tr>
<tr>
<td>MFAG</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Maximum Quantity</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

IATA/ICAO (Air): Classification: Not regulated

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Subsidiary Risk:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Maximum Quantity</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

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.

U.S. - CAA (Clean Air Act) - Volatile Organic Compounds (VOCs) in SOCMI
Formic acid, sodium salt 141-53-7 Present

CERCLA (Superfund) reportable quantity
Sodium hydroxide: 1000.0000

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
No

Clean Water Act (CWA)
Not available

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

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

FINISH® GELPACS® - Fresh - 8049722v1.0/8049749v1.0
FINISH® GELPACS® - Lavender - 8049726v1.0/8049753v1.0
FINISH® GELPACS® - Orange - 8049723v1.0/8049750v1.0

Issue date
25-Apr-2013

Effective date
15-Apr-2013

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.