

## 1. Product and Company Identification

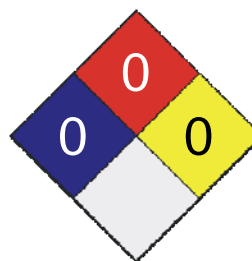
**Product Name** FINISH® GELPACS® - All Scents  
**CAS #** Mixture  
 This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the U.S. Government's 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	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 0
Flammability	0
Physical Hazard	0
Personal Protection	B



## 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

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

### 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

<b>Handling</b>	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.
<b>Storage</b>	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

<b>Exposure limits</b>	
<b>Ingredient(s)</b>	<b>Exposure Limits</b>
A-Amylase (EC# 3.2.1.1)	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Formic acid, sodium salt	<b>ACGIH-TLV</b> TWA: 10 mg/m3 <b>OSHA-PEL</b> TWA: 15 mg/m3
Polyvinyl alcohol	<b>ACGIH-TLV</b> TWA: 10 mg/m3 <b>OSHA-PEL</b> TWA: 5 mg/m3
Subtilisin carlsburg	<b>ACGIH-TLV</b> Ceiling: 0.0001 mg/m3 <b>OSHA-PEL</b> Not established
<b>Engineering controls</b>	General ventilation normally adequate.
<b>Personal protective equipment</b>	<b>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.</b>
<b>Eye / face protection</b>	tightly fitting safety goggles Emergency responders should wear full eye and face protection.
<b>Hand protection</b>	Follow standard industrial hygiene practices. Emergency responders should wear impermeable gloves.
<b>Skin and body protection</b>	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.
<b>Respiratory protection</b>	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.
<b>General hygiene considerations</b>	Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

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## 9. Physical and Chemical Properties

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

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## 10. Stability and Reactivity

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Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	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.
Incompatible materials	Caustics. Acids.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Some metallic oxides.

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## 11. Toxicological Information

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### Component analysis - LC50

Ingredient(s)	LC50
A-Amylase (EC# 3.2.1.1)	Not available
Formic acid, sodium salt	Not available
Polyvinyl alcohol	Not available
Subtilisin carlsburg	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
A-Amylase (EC# 3.2.1.1)	7500 mg/kg rat
Formic acid, sodium salt	4000 mg/kg dog
Polyvinyl alcohol	20000 mg/kg rat
Subtilisin carlsburg	Not available

**Effects of acute exposure**

<b>Eye</b>	Slightly irritating to the eyes.
<b>Skin</b>	None expected during normal conditions of use. Not expected to be a skin sensitizer.
<b>Inhalation</b>	None expected during normal conditions of use.
<b>Ingestion</b>	Health injuries are not known or expected under normal use.
<b>Sensitization</b>	The finished product is not expected to have chronic health effects.
<b>Chronic effects</b>	The finished product is not expected to have chronic health effects.
<b>Carcinogenicity</b>	The finished product is not expected to have chronic health effects.
<b>Mutagenicity</b>	The finished product is not expected to have chronic health effects.
<b>Reproductive effects</b>	The finished product is not expected to have chronic health effects.
<b>Teratogenicity</b>	The finished product is not expected to have chronic health effects.
<b>Name of Toxicologically Synergistic Products</b>	Not available

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## 12. Ecological Information

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<b>Ecotoxicity</b>	See below
<b>Ecotoxicity - Freshwater Fish - Acute Toxicity Data</b>	
Formic acid, sodium salt	141-53-7      24 Hr LC50 <i>Lepomis macrochirus</i> : 5000 mg/L
<b>Ecotoxicity - Water Flea - Acute Toxicity Data</b>	
Formic acid, sodium salt	141-53-7      24 Hr EC50 <i>Daphnia magna</i> : >1000 mg/L
<b>Persistence / degradability</b>	Not available
<b>Bioaccumulation / accumulation</b>	Not available
<b>Mobility in environmental media</b>	Not available
<b>Environmental effects</b>	Not available
<b>Aquatic toxicity</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Chemical fate information</b>	Not available

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## 13. Disposal Considerations

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<b>Disposal instructions</b>	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.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

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## 14. Transport Information

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<b>UN/ID N.o.</b>	Not applicable
<b>U.S. Department of Transportation (DOT): Classification:</b> Not regulated	
<b>Proper shipping name</b>	Not applicable
<b>U.S. DOT Hazard Class</b>	Not applicable
<b>Subsidiary Risk</b>	Not applicable
<b>Packing group</b>	Not applicable
<b>DOT RQ (lbs)</b>	Not applicable
<b>ERG NO</b>	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

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## 15. Regulatory Information

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**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**

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)

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**16. Other Information**

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**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.