

## 1. Product and Company Identification

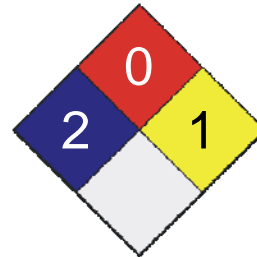
**Product Name** RESOLVE® (SPRAY'N WASH®) In-Wash Stain Remover  
**CAS #** Mixture  
**This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements 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** Stain remover

**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	/ 2
Flammability	0
Physical Hazard	1
Personal Protection	B



## 2. Hazards Identification

**Emergency overview** WARNING  
 Eye and skin irritant.  
 May be harmful if swallowed.  
 Do not get in eyes, on skin or ingest.  
 May be severely irritating to eyes. Wash hands after use. For sensitive skin, the use of gloves is recommended.

KEEP OUT OF REACH OF CHILDREN.

**Potential short term health effects**

**Routes of exposure**

Eye, Skin contact, Inhalation, Ingestion.

**Eyes**

None expected during normal conditions of use.  
 May be severe eye irritant

**Skin**

Skin irritant.  
 Not expected to be a skin sensitizer.

**Inhalation**

None expected during normal conditions of use.

**Ingestion**

May be harmful by ingestion.

**Target organs**

Eyes. Respiratory system. Skin.

**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.  
 Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**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.

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### 3. Composition / Information on Ingredients

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Ingredient(s)	CAS #	Percent
Hydrogen peroxide	7722-84-1	2.5 - 10
Alcohols, C12-16, ethoxylated	68551-12-2	10 - 20
Benzenesulfonic acid, C10-16-alkyl derivatives	68584-22-5	10 - 20
Sodium hydroxide	1310-73-2	1 - 2.5

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### 4. First Aid Measures

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#### First aid procedures

<b>Eye contact</b>	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 persists, get medical attention.
<b>Skin contact</b>	If on skin, wash area with plenty of soap and water. If irritation persists, get medical attention.
<b>Inhalation</b>	Move person to fresh air. If the person feels unwell, call a physician or Poison Control Center.
<b>Ingestion</b>	If swallowed, rinse mouth and drink a glass of water. Call a Physician or Poison Control Center. Do not induce vomiting.

#### Notes to physician

Symptoms may be delayed.

#### 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.

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### 5. Fire Fighting Measures

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

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### 6. Accidental Release Measures

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<b>Personal precautions</b>	Avoid contact with eyes. 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.
<b>Environmental precautions</b>	Do not discharge into lakes, streams, ponds or public waters. Advise authorities if product has penetrated drains, sewers or water pipes.
<b>Methods for containment</b>	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills to original containers for re-use.

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## 7. Handling and Storage

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<b>Handling</b>	Ensure adequate ventilation. Do not get in eyes, on skin or ingest. When using do not eat or drink. Wash hands before breaks and immediately after handling the product. Use good industrial hygiene practices in handling this product. Read and follow product label for instructions.
<b>Storage</b>	Keep container tightly closed in a cool, dry and well-ventilated place. Store in a cool dry place inaccessible to children and pets. Store upright to prevent product leakage. Store away from heat sources.

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## 8. Exposure Controls / Personal Protection

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### Exposure limits

Ingredient(s)	Exposure Limits
Alcohols, C12-16, ethoxylated	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Benzenesulfonic acid, C10-16-alkyl derivatives	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Hydrogen peroxide	<b>ACGIH-TLV</b> TWA: 1 ppm <b>OSHA-PEL</b> TWA: 1 ppm
Sodium hydroxide	<b>ACGIH-TLV</b> Ceiling: 2 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 2 mg/m <sup>3</sup>

### 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.**

<b>Eye / face protection</b>	When handling in large quantities or responding to emergency situations, the use of appropriate eye protection is recommended. Emergency responders should wear full eye and face protection.
<b>Hand protection</b>	For sensitive skin or prolonged use, wear rubber gloves. Emergency responders should wear impermeable gloves.
<b>Skin and body protection</b>	As required by employer code. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.
<b>Respiratory protection</b>	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.
<b>General hygiene considerations</b>	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.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Clear gel
<b>Color</b>	Blue
<b>Form</b>	Liquid
<b>Odor</b>	Perfume
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Liquid
<b>pH</b>	3.5 ± 0.3 (as is)
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	Not determined
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	1.04 ± 0.005 G/mL
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H2O)</b>	High
<b>Viscosity</b>	800 ± 100 Cps @ 25°C (Brookfield LV type, Spindle #31, 12 rpm)

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## 10. Stability and Reactivity

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<b>Reactivity</b>	This product may react with oxidizing agents.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	DO NOT MIX WITH BLEACH or use in conjunction with other household products. Heat (T>50°C), product contamination. Extremes of temperature and direct sunlight.
<b>Incompatible materials</b>	Oxidizers. Caustics.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.

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## 11. Toxicological Information

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### Component analysis - LC50

<b>Ingredient(s)</b>	<b>LC50</b>
Alcohols, C12-16, ethoxylated	Not available
Benzenesulfonic acid, C10-16-alkyl derivatives	Not available
Hydrogen peroxide	Not available
Sodium hydroxide	Not available

### Component analysis - Oral LD50

<b>Ingredient(s)</b>	<b>LD50</b>
Alcohols, C12-16, ethoxylated	1380 mg/kg rat
Benzenesulfonic acid, C10-16-alkyl derivatives	530 mg/kg rat
Hydrogen peroxide	75 mg/kg rat; 2000 mg/kg mouse
Sodium hydroxide	Not available

### Effects of acute exposure

<b>Eye</b>	None expected during normal conditions of use. May be severe eye irritant
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<b>Skin</b>	Skin irritant. Not expected to be a skin sensitizer.
<b>Inhalation</b>	None expected during normal conditions of use.
<b>Ingestion</b>	May be harmful by ingestion.
<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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**Ecotoxicity** Contained surfactants are ultimate aerobically biodegradable according to method OECD 301. The liquid contains hydrogen peroxide which decomposes in oxygen and water with no adverse effect. For surfactants with EC 50 < 1mg/l no adverse long-term effects to the aquatic environment are foreseen, due to their biodegradability and non-bioaccumable properties. The product may exhibit acute effects in case of massive discharge in watercourses.

**Ecotoxicity - Freshwater Algae - Acute Toxicity Data**

Hydrogen peroxide 7722-84-1 72 Hr EC50 Chlorella vulgaris: 2.5 mg/L

**Ecotoxicity - Freshwater Fish - Acute Toxicity Data**

Benzenesulfonic acid, C10-16-alkyl derivatives 68584-22-5 96 Hr LC50 Oncorhynchus mykiss: 3 mg/L [static]

Hydrogen peroxide 7722-84-1 96 Hr LC50 Pimephales promelas: 16.4 mg/L; 96 Hr LC50 Lepomis macrochirus: 18-56 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 10.0-32.0 mg/L [static]  
Sodium hydroxide 1310-73-2 96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static]

**Ecotoxicity - Water Flea - Acute Toxicity Data**

Benzenesulfonic acid, C10-16-alkyl derivatives 68584-22-5 48 Hr EC50 Daphnia magna: 2.9 mg/L

Hydrogen peroxide 7722-84-1 24 Hr EC50 Daphnia magna: 7.7 mg/L; 48 Hr EC50 Daphnia magna: 18 - 32 mg/L [Static]

<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>	Dispose in accordance with all applicable regulations.
<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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**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

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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. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Sodium hydroxide 1310-73-2 1000 Lb final RQ; 454 kg final RQ

### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

Hydrogen peroxide 7722-84-1 1000 Lb EPCRA RQ (concentration >52%)

### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

Hydrogen peroxide 7722-84-1 1000 Lb TPQ (concentration >52%)

### U.S. - CWA (Clean Water Act) - Hazardous Substances

Sodium hydroxide 1310-73-2 Present

### CERCLA (Superfund) reportable quantity

Sodium hydroxide: 1000.0000

Sulphuric acid: 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)** Hazardous substance

**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**

Hydrogen peroxide	7722-84-1	Present
Sodium hydroxide	1310-73-2	Present

**U.S. - Louisiana - Reportable Quantity List for Pollutants**

Sodium hydroxide	1310-73-2	1000 Lb final RQ; 454 kg final RQ
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**U.S. - Massachusetts - Right To Know List**

Hydrogen peroxide	7722-84-1	Extraordinarily hazardous
Sodium hydroxide	1310-73-2	Present

**U.S. - Minnesota - Hazardous Substance List**

Hydrogen peroxide	7722-84-1	Present (including Hydrogen peroxide [90%])
Sodium hydroxide	1310-73-2	Present

**U.S. - New Jersey - Right to Know Hazardous Substance List**

Hydrogen peroxide	7722-84-1	sn 1015
Sodium hydroxide	1310-73-2	sn 1706

**U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances**

Hydrogen peroxide	7722-84-1	1 Lb RQ (air); 1 lb RQ (land/water)
Sodium hydroxide	1310-73-2	1000 Lb RQ (air); 100 lb RQ (land/water)

**U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities**

Hydrogen peroxide	7722-84-1	500 Lb TQ (concentration >52%)
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**U.S. - Pennsylvania - RTK (Right to Know) List**

Hydrogen peroxide	7722-84-1	Environmental hazard (concentration >52%); Present
Sodium hydroxide	1310-73-2	Environmental hazard

**U.S. - Rhode Island - Hazardous Substance List**

Hydrogen peroxide	7722-84-1	Toxic; Flammable
Sodium hydroxide	1310-73-2	Toxic (caustic); Flammable (caustic)

**U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Reportable Quantities**

Hydrogen peroxide	7722-84-1	1000 Lb RQ
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**U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Threshold Planning Quantities**

Hydrogen peroxide	7722-84-1	1000 Lb TPQ (concentration >52%)
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**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**

RESOLVE® (SPRAY'N WASH®) In-Wash Stain Remover, 22 oz/40 oz/92 oz - 0269128v1.0

**Issue date**

08-Feb-2013

**Effective date**

01-Feb-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.