

1. Product and Company Identification

Product Name RESOLVE® (SPRAY'N WASH®) Dual Power Laundry Stain Remover
CAS # Mixture

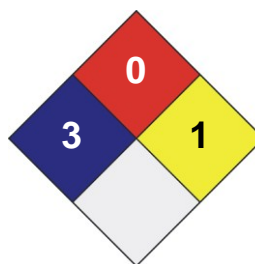
This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the Canadian Workplace Hazardous Materials Information System (WHMIS).
 This MSDS is 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 (Canada) Inc.
 1680 Tech Avenue Unit #2
 Mississauga, ON L4W 5S9
 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	/ 3
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	B



2. Hazards Identification

Emergency Overview DANGER
 Corrosive to eyes.
 HARMFUL IF SWALLOWED.
 Skin irritant
 Do not get in eyes or on skin.
 Do not ingest.
 Wash hands immediately after use.
 To open, squeeze tabs and turn cap.

Keep out of reach of children.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes Corrosive to eyes.

Skin Skin irritant.
 Not expected to be a skin sensitizer.

Inhalation Inhalation toxicity not determined.

Ingestion Harmful if swallowed.

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, oedema, drying, defatting and cracking of the skin.
 Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition/Information on Ingredients

Components	CAS #	Percent
Alcohols, C12-16, ethoxylated	68551-12-2	7 - 13
Hydrogen peroxide	7722-84-1	7 - 13
1,2-Propylene glycol	57-55-6	1 - 5
Sodium citrate	6132-04-3	1 - 5
Sodium tetraborate	1303-96-4	0.1 - 1
Subtilisin protease enzyme	9014-01-1	0 - 0.1

4. First Aid Measures

First aid procedures

Eye contact

In case of eye contact, IMMEDIATELY rinse eyes thoroughly with plenty of water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. Get medical attention immediately.

Skin contact

In case of skin contact, rinse with plenty of water. If irritation persists, get medical attention. For sensitive skin, the use of gloves is recommended. Remove any contaminated clothing and wash thoroughly with soap and water.

Inhalation

If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion

If swallowed, rinse mouth and drink a glass of water. Do not induce vomiting. Call a physician or Poison Control Center IMMEDIATELY. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing.

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 WHMIS criteria.

Extinguishing media**Suitable extinguishing media**

Water spray. Foam. Dry chemical. Carbon dioxide.

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.

Explosion data**Sensitivity to mechanical impact**

Not available.

Sensitivity to static discharge

Not available.

6. Accidental Release Measures

Personal precautions

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.

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.
Methods for cleaning up	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.

7. Handling and Storage

Handling	<p>DANGER CORROSIVE TO EYES. SKIN IRRITANT. HARMFUL IF SWALLOWED. Do not get in eyes or on skin. Do not ingest. Wash hands immediately after use. When using do not eat or drink. Read package label carefully. Use according to package label instructions. Ensure adequate ventilation. To open, squeeze tabs and turn cap. Test garment by applying to an inconspicuous area. Not recommended for use on wool, khaki, fluorescent clothing or washable silk. Do not allow DualPower to dry on garment. Do not use on metal.</p>
Storage	<p>Keep out of reach of children. Store in a closed container away from incompatible materials. Store in a cool dry place inaccessible to children and pets. Protect from direct sunlight. Keep container upright to prevent product leakage.</p>

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm	
Sodium Tetraborate (CAS 1303-96-4)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
Subtilisin protease enzyme (CAS 9014-01-1)	Ceiling	0.00006 mg/m3	

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

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 If splashes are likely to occur, wear: Face shield or chemical goggles. Emergency responders should wear full eye and face protection.

Hand protection Impervious gloves.
Avoid contact with the skin.
Emergency responders should wear impermeable gloves.

Skin and body protection 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.
If clothing or footwear becomes contaminated with the product, remove it and completely decontaminate it before re-use, or discard it.

Respiratory protection

Not normally required under normal use conditions.
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	Liquid
Colour	Pink (Chamber A) Clear (Chamber B)
Form	Fluid
Odour	Floral
Odour threshold	Not available.
Physical state	Liquid.
pH	4.0 ± 0.5 (Clear), 8.5 ± 0.5 (Pink), 6.5 (Final product)
Freezing point	Not available.
Boiling point	Not available.
Pour point	Not available.
Evaporation Rate	Not available
Flash point	> 93.00 °C (> 199.40 °F)
Auto-ignition temperature	Not available.
Flammability Limits in Air, Upper, % by Volume	Not available.
Flammability Limits in Air, Lower, % by Volume	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Specific gravity	1.036
Partition coefficient (n-octanol/water)	Not available.
Solubility (Water)	Complete
Relative density	Not available.
Viscosity	Water-like
VOC	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	Do not spray on metals. May react with strong bases or oxidizing agents. Sodium hypochlorite.
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. Heat (T>50°C), product contamination.
Incompatible materials	Oxidizers. Caustics.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

11. Toxicological Information

Toxicological data

Components	Species	Test results
1,2-Propylene glycol (CAS 57-55-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	20800 mg/kg
<i>Oral</i>		
LD50	Dog	19000 mg/kg
	Guinea pig	18400 mg/kg
	Mouse	23900 mg/kg
	Rabbit	14800 mg/kg
	Rat	20000 mg/kg
LC50		
Not available.		
Alcohols, C12-16, ethoxylated (CAS 68551-12-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	>= 2000 mg/kg
<i>Oral</i>		
LD50	Rat	1380 mg/kg
LC50		
Not available.		
Hydrogen peroxide (CAS 7722-84-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
	Rat	2000 mg/kg
<i>Oral</i>		
LD50	Mouse	2000 mg/kg
	Rat	75 mg/kg
LC50		
Not available.		
Sodium citrate (CAS 6132-04-3)		
Acute		
<i>Oral</i>		
LD50		> 8000 mg/kg
LC50		
Not available.		
Sodium tetraborate (CAS 1303-96-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	10000 mg/kg
<i>Oral</i>		
LD50	Guinea pig	5330 mg/kg
	Mouse	2000 mg/kg
	Rat	2660 mg/kg
		396 mg/kg

Components	Species	Test results
LC50 Not available.		
Subtilisin protease enzyme (CAS 9014-01-1)		
Acute <i>Oral</i> LD50	Rat	2000 mg/kg
LC50 Not available.		
Effects of acute exposure		
Eye contact	Corrosive to eyes.	
Skin contact	Skin irritant. Not expected to be a skin sensitizer.	
Inhalation	Inhalation toxicity not determined.	
Ingestion	Harmful if swallowed.	
Sensitisation	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 Components of this product have been identified as having potential environmental concerns.

Ecotoxicological data

Components	Species	Test results
1,2-Propylene glycol (CAS 57-55-6)		
Crustacea	EC50	Daphnia
		10000 mg/L, 48 Hours
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna)
		> 10000 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)
		710 mg/L, 96 hours
Hydrogen peroxide (CAS 7722-84-1)		
Algae	IC50	Algae
		2.5 mg/L, 72 Hours
Crustacea	EC50	Daphnia
		7.7 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.	

Partition coefficient
1,2-Propylene glycol -0.92
Chemical fate information Not available.

13. Disposal Considerations

Disposal instructions Empty container can be discarded in the trash or recycled where appropriate.
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

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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

Canada WHMIS Ingredient Disclosure: Threshold limits

1,2-Propylene glycol (CAS 57-55-6)	1 %
Hydrogen peroxide (CAS 7722-84-1)	1 %
Sodium tetraborate (CAS 1303-96-4)	1 %

WHMIS Classification Exempt - Consumer product

Inventory Status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	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 RESOLVE® (SPRAY 'N WASH®) Dual Power Laundry Stain Remover - Colourless Liquid (Oxygen) & Pink Liquid (Enzyme), 650mL - 0068264v1.0/0068261v5.0

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Expiry Date 01-October-2016

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.