# SAFETY DATA SHEET

RESOLVE® High Traffic Area Pet Foam Carpet Cleaner

HEALTH • HYGIENE • HOME

## 1. Product and company identification

**Product name** : RESOLVE® High Traffic Area Pet Foam Carpet Cleaner

**Distributed by** : Reckitt Benckiser (Canada) Inc.
1680 Tech Avenue, Unit #2
Mississauga, Ontario L4W 5S9
CANADA
Telephone: +1 905 283 7000

**Emergency telephone number (Medical)** : 1-800-338-6167

**Emergency telephone number (Transport)** : 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec:703-527-3887

**Website:** : **http://www.rbnainfo.com**

**Product use** : Fabric Care

**This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.**

**This SDS 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 regulations, and shown in Section 15 of this SDS.**

**SDS #** : D8040582_5

**Formulation #:** : 8125757 v1.0

**UPC Code / Sizes** : can 22 FL. OZ. (1 LB. 5,9 OZ.) 623 g brimful capacity: can 790 cc

## 2. Hazards identification

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1
GASES UNDER PRESSURE - Compressed gas

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 1.4%

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.

**Precautionary statements**

# 2. Hazards identification

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

**Response** : Not applicable.

**Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

**Disposal** : Not applicable.

**Supplemental label elements** : Use only in well ventilated areas
Keep children and pets off carpet till dry

**Hazards not otherwise classified** : None known.

# 3. Composition/information on ingredients

**Substance/mixture** : Mixture

| Ingredient name | % | CAS number |
|---|---|---|
| butane | 2.5 - 5 | 106-97-8 |
| propane | 1 - 2.5 | 74-98-6 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

# 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

# 4. First aid measures

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
irritation
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicological information (Section 11)**

# 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

# 8. Exposure controls/personal protection

## Control

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| butane | **OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 800 ppm 8 hours.<br>TWA: 1900 mg/m³ 8 hours.<br>**NIOSH REL (United States, 10/2013).**<br>TWA: 800 ppm 10 hours.<br>TWA: 1900 mg/m³ 10 hours.<br>**ACGIH TLV (United States, 6/2013).**<br>STEL: 1000 ppm 15 minutes. |
| propane | **OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 1000 ppm 8 hours.<br>TWA: 1800 mg/m³ 8 hours.<br>**NIOSH REL (United States, 10/2013).**<br>TWA: 1000 ppm 10 hours.<br>TWA: 1800 mg/m³ 10 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 1000 ppm 8 hours.<br>TWA: 1800 mg/m³ 8 hours. |

**Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

# 8. Exposure controls/personal protection

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# 9. Physical and chemical properties

**Appearance**

**Physical state** : Liquid. [Aerosol.]

**Color** : White.

**Odor** : Characteristic.

**Odor threshold** : Not available.

**pH** : [Conc. (% w/w): 1%]

**Melting point** : Not available.

**Boiling point** : Not available.

**Flash point** : Closed cup: >93.3°C (>199.9°F)

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : Not available.

**Relative density** : Not available.

**Solubility** : Not available.

**Partition coefficient: n-octanol/water** : Not available.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**Viscosity** : Not available.

**Flow time (ISO 2431)** : Not available.

**Aerosol product**

**Type of aerosol** : Foam

**Heat of combustion** : 2.064 kJ/g

# 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| butane | LC50 Inhalation Vapor | Rat | 658000 mg/m³ | 4 hours |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Irritation/Corrosion

Not available.

**Conclusion/Summary**

**Skin** : Mild irritant

**Eyes** : Slightly irritating to the eyes.

**Respiratory** : Based on available data, the classification criteria are not met.

### Sensitization

Not available.

**Conclusion/Summary**

**Skin** : Non-sensitizer to skin.

**Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Not available.

# 11. Toxicological information

## Specific target organ toxicity (repeated exposure)

Not available.

## Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:
irritation
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

# 11. Toxicological information

| Route | ATE value |
|---|---|
| ORAL (LD50) Calculated value for the mixture | > 2000 mg/kg |

# 12. Ecological information

## Toxicity

Not available.

## Persistence and degradability

Not available.

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| butane | 2.89 | - | low |
| propane | 1.09 | - | low |

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

# 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

# 14. Transport information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|---|---|---|---|---|---|---|
| DOT Classification | UN1950 | AEROSOLS | 2.1 | - |   | - |
| | | | | | | |

# 14. Transport information

| | | | | | | |
|---|---|---|---|---|---|---|
| **TDG Classification** | UN1950 | AEROSOLS | 2.1 | - |  | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2. 17 (Class 2). |
| **Mexico Classification** | UN1950 | AEROSOLS | 2.1 | - |  | - |
| **IMDG Class** | UN1950 | AEROSOLS | 2.1 | - |  | - |
| **IATA-DGR Class** | UN1950 | Aerosols, flammable | 2.1 | - |  | - |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

PG* : Packing group

# 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR**: piperonal; dodecanal; 2-methylundecanal; undec-9-enal; anisaldehyde; α-hexylcinnamaldehyde; 2-(4-tert-butylbenzyl)propionaldehyde; phenylacetaldehyde; 2-benzylideneheptanal

**TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**United States inventory (TSCA 8b)**: All components are listed or exempted.

**Clean Water Act (CWA) 311**: styrene; ammonia; Formaldehyde, solution

**Clean Air Act (CAA) 112 regulated flammable substances**: butane; propane

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

# 15. Regulatory information

| Name | % | EHS | SARA 302 TPQ (lbs) | SARA 302 TPQ (gallons) | SARA 304 RQ (lbs) | SARA 304 RQ (gallons) |
|---|---|---|---|---|---|---|
| Formaldehyde, solution<br>ethylene oxide | < 0.01<br>< 0.01 | Yes.<br>Yes. | 500<br>1000 | 73.9<br>- | 100<br>10 | 14.8<br>- |

**SARA 304 RQ** : 2500000000 lbs / 1135000000 kg

**SARA 311/312**

**Classification** : Fire hazard
Sudden release of pressure

**Composition/information on ingredients**

| Name | % | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|---|---|---|---|---|---|
| butane<br>propane | 2.5 - 5<br>1 - 2.5 | Yes.<br>Yes. | Yes.<br>Yes. | No.<br>No. | No.<br>No. | No.<br>No. |

**State regulations**

**Massachusetts** : The following components are listed: BUTANE; PROPANE

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: BUTANE; PROPANE

**Pennsylvania** : The following components are listed: BUTANE; PROPANE

**Canada**

**WHMIS (Canada)** : Class B-5: Flammable aerosol.

**Canadian lists**

**Canadian NPRI** : The following components are listed: Butane (all isomers); Propane

**CEPA Toxic substances** : None of the components are listed.

**Canada inventory** : Not determined.

**Label elements**

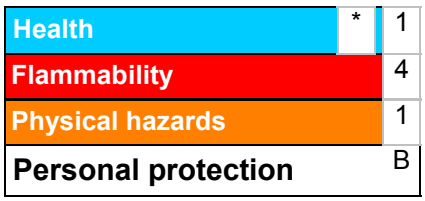
**Signal word** : CAUTION

**Hazard statements** : CONTENTS UNDER PRESSURE
CONTAINER MAY EXPLODE IF HEATED

**Precautionary measures** : Do not puncture. Do not burn.

# 16. Other information

**Hazardous Material Information System (U.S.A.)** :



# 16. Other information

**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

**National Fire Protection Association (U.S.A.)** :




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**Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.**

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

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**Indicates information that has changed from previously issued version.**

**Notice to reader**

# 16. Other information

**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.**

RB is a member of the CSPA Product Care Product Stewardship Program.