SAFETY DATA SHEET



Lysol Dual Action Disinfecting Wipes - All Scents

1. Product and company identification

Product name	: Lysol Dual Action Disinfecting Wipes - All Scents
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

: Disinfectant.

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 #	:	D0289451 v7.0
Formulation #:	:	Citrus (0356376 v1.0 & 0241648 v3.0) Crisp Linen (0356378 v1.0 & 0247626 v3.0)
DIN #	1	02360063
UPC Code / Sizes	:	35 & 75 wet wipes 7" x 8" sheets 24 & 50 wet wipes 8.4" x 10" sheets

2. Hazards identification : Not classified **Classification of the** substance or mixture **GHS label elements** Hazard pictograms : Not applicable. Signal word : No signal word. **Hazard statements** : No known significant effects or critical hazards. **Precautionary statements** General : Keep out of reach of children. If medical advice is needed, have product container or label at hand. **Prevention** : Not applicable. Code # : D0289451 (Canada) : D0289451 v7.0 Date of issue : 13/04/2017 1/12 SDS

2. Hazards identification	
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Supplemental label elements	: None known.
Hazards not otherwise classified	: None known.

3. Composition/information on ingredients

Substance/mixture : Mixture		
Ingredient name	%	CAS number
ethanol Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	1 - 2.5 0.1 - 1	64-17-5 68424-85-1

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. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most important sympto	ms/effects, acute and delayed
Potential acute health	<u>effects</u>

Eye contact	4	May cause eye irritation upon direct contact with eyes.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	1	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/sympt	on	ns
Eye contact	:	Adverse symptoms may include the following: pain or irritation redness
Inhalation	1	No specific data.
Skin contact	1	No specific data.
Ingestion	:	No specific data.

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

4. First aid measures

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.

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	: No specific 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.
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, protec	<u>tiv</u>	e 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. Do not touch or walk through spilled material. 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 co	onta	ainment and cleaning up
Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. 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).
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept

containment to avoid environmental contamination.

upright to prevent leakage. Do not store in unlabeled containers. Use appropriate

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
ethanol	ACGIH TLV (United States, 3/2015). STEL: 1000 ppm 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours. NIOSH REL (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1900 mg/m ³ 10 hours. OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours.
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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 meas	<u>ires</u>
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.
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.

D0289451 v7.0		
8. Exposure controls/personal protection		
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

<u>Appearance</u>		
Physical state	1	Solid. [Presaturated Wipes]
Color	:	Clear liquid /White. Wipes
Odor	:	Characteristic.
Odor threshold	1	Not available.
рН	1	10.5 [Conc. (% w/w): 100%] (liquid preparation)
Melting point	1	Not available.
Boiling point	1	Not available.
Flash point	1	Closed cup: >93.3°C (>199.9°F) (liquid preparation)
Evaporation rate	1	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	1	0.97 to 0.996 g/cm ³ [20 to 25°C] (liquid preparation)
Solubility	1	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Not available.
Flow time (ISO 2431)	1	Not available.

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	: Keep away from extreme heat.
Incompatible materials	: Do not use together with other products.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	LD50 Dermal	Rabbit	2848 mg/kg	-
	LD50 Dermal	Rabbit	3413 mg/kg	-
	LD50 Oral	Rat	344 mg/kg	-
	LD50 Oral	Rat	398 mg/kg	-
*Lysol Dual Action Wipes	LC50 Inhalation Vapor	Rat	>2.04 mg/l	14 days
-	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : Not classified Harmful *Information is based on toxicity test result of the concentrate of a similar product.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ethanol	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	Skin - Severe irritant	Rabbit	-	25 milligrams	-
*Lysol Dual Action Wipes	Eyes - Cornea opacity Skin - Slight irritant	Rabbit Rabbit	<1 1.2	24 hours -	7 days -

Conclusion/Summary

Skin Eyes : Slightly irritating to the skin. *Information is based on toxicity test result of the concentrate of a similar product.

: Moderately irritating to eyes. *Information is based on toxicity test result of the concentrate of a similar product.

Respiratory

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

Sensitization

11. Toxicological information

Product/ingredient name	Route of exposure	Species	Result			
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	skin	Guinea pig	Not sensitizing			
*Lysol Brand III Kills 99.9% of Viruses & Bacteria**Scrubbing Power Bathroom Wipes	skin	Guinea pig	Not sensitizing			

- **Conclusion/Summary**
- Skin : Non-sensitizer to skin. *Information is based on toxicity test result of the concentrate of a similar product.
- Respiratory
- : Based on available data, the classification criteria are not met.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	OECD 471 - Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473 - Mammalian Chromosamal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 476 - Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative

Conclusion/Summary

mary : 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.

Classification

Product/ingredient name	OSHA	IARC	NTP
ethanol	-	1	-

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.

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

Not available.

11. Toxicological information

Information on the likely routes of exposure	Not available.	
Potential acute health effects		
Eye contact	May cause eye irritation upon direct contact with eyes.	
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.	
<u>Symptoms related to the phy</u> Eye contact	al, chemical and toxicological characteristics Adverse symptoms may include the following: pain or irritation redness	
Inhalation	No specific data.	
Skin contact	No specific data.	
Ingestion	No specific data.	
Delayed and immediate effec	and also chronic effects from short and long term exposu	<u>re</u>

<u>Short term exposure</u>		
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 effe	ect	<u>s</u>
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

Not available.

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12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 2000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 25500 µg/l Marine water	Crustaceans - Artemia franciscana - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Oncorhynchus mykiss	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	Acute EC50 0.016 mg/l	Daphnia	48 hours
	Acute LC50 64 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic EC10 0.009 mg/l	Algae	72 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethanol	-0.35	-	low

Mobility in soil

Soil/water partition : Not available. coefficient (K_{oc})

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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14. Transport information

Not a DOT controlled material (United States). Not a TDG-controlled material. This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

15. Regulatory information

	S. Federal regulations : TSCA 4(a) proposed test rules: Quaternary ammonium compounds, benzyl- C12-16-alkyldimethyl, chlorides					
	TSCA 8(a) PAIR : 2-methylpropan-2-ol; octanal; decanal; 2-methylundecanal; α- hexylcinnamaldehyde; phenylacetaldehyde					
	8(a) CDR Exe	-	-		ned	
United	d States inven	tory (TSC	CA 8b): Not de	termined.		
Clean Air Act Section 112 : Not lis (b) Hazardous Air Pollutants (HAPs)	ted					
Clean Air Act Section 602 : Not lis Class I Substances	ted					
Clean Air Act Section 602 : Not lis Class II Substances	ted					
DEA List I Chemicals : Not lis (Precursor Chemicals)	ted					
DEA List II Chemicals : Not lis (Essential Chemicals)	ted					
<u>SARA 302/304</u>						
Composition/information on ingred	ents					
No products were found.						
SARA 304 RQ : Not ap	plicable.					
SARA 311/312	photolo.					
	plicable.					
Composition/information on ingred	•					
Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
ethanol Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloride	1 - 2.5 0.1 - 1	Yes. No.	No. No.	No. No.	Yes. Yes.	No. No.
State regulations						
_	llowing compo	nents are	listed: ETHYL	ALCOHOL; [DENATURED A	LCOHOL
New York : None	of the compone	ents are li	sted.			
New Jersey : The fo	llowing compo	nents are	listed: ETHYL	ALCOHOL; A	ALCOHOL	
Pennsylvania : The fo	llowing compo	nents are	listed: DENAT	URED ALCO	HOL; ETHANC)L
Canada						
Canada WHMIS (Canada) : Not co	ontrolled under		Canada)			
Canadian lists			Callada).			
Code # : D0289451 (Canada) SD	S # : D()289451 v	7.0 Date	of issue :	13/04/2017	10/12

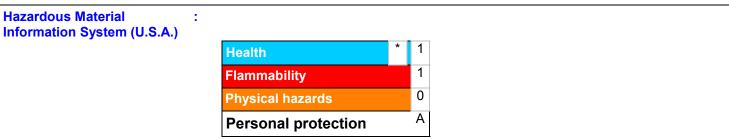
15. Regulatory information

Canadian NPRI	: The following components are listed: Ethanol
CEPA Toxic substances	: None of the components are listed.
Canada inventory	: Not determined.
Label elements	

Wash hands after use.

Signal word:	: CAUTION
Hazard statements	: May cause eye irritation.
Precautionary measures	: Keep out of reach of children.
	Avoid contact with eyes.

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.

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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 = Internediate 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

16. Other information

	as modified by the Protocol of 1978. ("Marpol" = mar UN = United Nations	ne pollution)
Date of issue Date of previous issue Version	13/04/2017 18/05/2015. 7	
Prepared by	Reckitt Benckiser LLC. Product Safety Department 1 Philips Parkway Montvale, New Jersey 07646-1810 USA. FAX: 201-476-7770	

Revision comments : Addition of Sting formulas (0247626 & 0241648)

Indicates information that has changed from previously issued version.

Notice to reader

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.