SAFETY DATA SHEET



LYSOL® Clean & Fresh Multi-Surface Cleaner - Sparkling Lemon & Sunflower Essence

1. Product and company identification

Product name : LYSOL® Clean & Fresh Multi-Surface Cleaner - Sparkling Lemon & Sunflower Essence

Distributed by : Reckitt Benckiser LLC.

Morris Corporate Center IV

399 Interpace Parkway (P.O. Box 225) Parsippany, New Jersey 07054-0225

+1 973 404 2600

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 : Multipurpose Cleaner Consumer use

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 # : D8216064 v4.0 Formulation #: : 8259408 v1.0 DIN # : 02245935

UPC Code / Sizes : Liquid / 28oz, 40oz and 52 oz PET bottle/ HDPE bottles 750 ml

2. Hazards identification

Classification of the substance or mixture

: EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms



2. Hazards identification

Signal word : Warning

Hazard statements : Causes serious eye irritation.

Precautionary statements

General : Keep out of reach of children. If medical advice is needed, have product container or

label at hand.

Prevention: Wear eye or face protection. Wash hands thoroughly after handling.

Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label : Not applicable

Supplemental label

elements

Hazards not otherwise

classified

: None known.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides		68002-97-1 68424-85-1 138-86-3

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

: 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.

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.

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.

4. First aid measures

Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

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:

pain or irritation watering redness

Inhalation: No specific data.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

Hazardous thermal decomposition products

: No specific fire or explosion hazard.

Special protective actions

: No specific data.

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, 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. Do not touch or walk through spilled material. 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 nonemergency 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. 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. 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

including any incompatibilities

Conditions for safe storage, : 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 upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

Ingredient name	Exposure limits
dl-Limonene (racemic)	AIHA WEEL (United States, 10/2011). TWA: 30 ppm 8 hours.

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8. Exposure controls/personal protection

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 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: chemical splash goggles.

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.

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.

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. [Transparent]

Color : Greenish yellow & fluorescent

Odor threshold : Lemon-like.

Not available.

pH : 8.5 to 9.5 [Conc. (% w/w): 100%][25°C]

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 : Not available.

(flammable) limits

9. Physical and chemical properties

Vapor pressure : Not available.
Vapor density : Not available.

Relative density : 1.002 to 1.012 g/cm³ [25°C]

Solubility : Easily soluble in the following materials: cold water and hot water.

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.

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 : No specific data.

Incompatible materials: Do not use with other products.

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
Alcohols, C12-16, ethoxylated	LD50 Oral	Rat	500 to 2000 mg/ kg	-
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	LD50 Oral	Rat	344 mg/kg	-
"Lysol Brand Kills 99.9% of Viruses & Bacteria** Clean & Fresh Multi-Surface Cleaner – Lemon Sunflower	LC50 Inhalation Vapor	Rat	>2.2 mg/l	14 days

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

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Alcohols, C12-16, ethoxylated	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Skin - Severe irritant	Rabbit	-	25 milligrams	-
*Lysol Brand Kills 99.9% of Viruses & Bacteria** Clean & Fresh Multi-Surface Cleaner	Eyes - Cornea opacity	Rabbit	0	-	7 days

11. Toxicological information

 Lemon Sunflower 					
	Skin - Primary dermal rritation index (PDII)	Rat	0.8	-	-

Conclusion/Summary

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

product.

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

product.

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

Sensitization

3	Route of exposure	Species	Result
"Lysol Brand Kills 99.9% of Viruses & Bacteria** Clean & Fresh Multi-Surface Cleaner – Lemon Sunflower	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin : Non-sensitizer to skin. *Information is based on toxicity test result 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

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

Carcinogenicity

Not available.

Conclusion/Summary

Conclusion/Summary

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

Reproductive toxicity

Not available.

: 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.

11. Toxicological information

Aspiration hazard

Name	Result
dl-Limonene (racemic)	ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

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:

pain or irritation watering redness

Inhalation: No specific data.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 : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

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

Not available.

11. Toxicological information

12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Alcohols, C10-16, ethoxylated	LC50 >1 mg/l	Fish - Cyprinus carpio	96 hours
	Chronic EC10 0.1 to 1 mg/l	Fish - Pimephales promelas	-
Quaternary ammonium	Acute EC50 0.016 mg/l	Daphnia	48 hours
compounds, benzyl-			
C12-16-alkyldimethyl,			
chlorides			
	Acute LC50 64 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic EC10 0.009 mg/l	Algae	72 hours
dl-Limonene (racemic)	Acute EC50 28.2 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
, ,	Acute EC50 20.2 mg/l Fresh water	Fish - Pimephales promelas -	96 hours
		Juvenile (Fledgling, Hatchling,	
		Weanling)	
	Acute IC50 13.798 mg/l Fresh water	Algae - Pseudokirchneriella	96 hours
	J	subcapitata	

Conclusion/Summary

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

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
dl-Limonene (racemic)	4.57	-	high

Mobility in soil

Soil/water partition coefficient (Koc)

: 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

13. Disposal considerations

when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not Regulated	Not applicable.	Not available.	-		-
TDG Classification	Not Regulated	Not applicable.	Not available.	-		-
Mexico Classification	Not Regulated	Not applicable.	Not available.	-		-
IMDG Class	Not Regulated	Not applicable.	Not available.	-		-
IATA-DGR Class	Not Regulated	Not applicable.	Not available.	-		-

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 4(a) proposed test rules: Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

TSCA 8(a) PAIR: α-hexylcinnamaldehyde; 2-(4-tert-butylbenzyl)propionaldehyde; phenylacetaldehyde

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: sodium hydroxide; ammonia, anhydrous

Clean Air Act Section 112 : Not listed (b) Hazardous Air

Pollutants (HAPs)

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15. Regulatory information

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

BEA114161 1 1

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

DEA List II Chemicals (Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Ammonia	< 0.01	Yes.	500	-	100	-

SARA 304 RQ : 1000000000 lbs / 454000000 kg [119100408.7 gal / 450844091.4 L]

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Alcohols, C10-16, ethoxylated Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides dl-Limonene (racemic)		No. No. Yes.	No. No.	No. No.	Yes. Yes.	No. No.

State regulations

MassachusettsNone of the components are listed.New YorkNone of the components are listed.

New Jersey : The following components are listed: ETHYL ALCOHOL; ALCOHOL

Pennsylvania : The following components are listed: DENATURED ALCOHOL; ETHANOL

Canada

WHMIS (Canada) : Class D-1B: Material causing immediate and serious toxic effects (Toxic).

Class E: Corrosive material

Canadian lists

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

Canada inventory : Not determined.

Label elements

Signal word : CAUTION

Hazard statements : Causes moderate eye irritation

15. Regulatory information

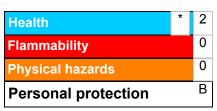
Precautionary measures

Keep out of reach of children. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. If you have

sensitive skin wear rubber gloves.

16. Other information

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



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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Date of previous issue : 11/07/2018

Version : 3

16. Other information

Prepared by : Reckitt Benckiser India Ltd

Plot No 48 Sector - 32 Institutional Area Gurgaon, Haryana India - 122001

Revision comments: Update of SDS.

▼ 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.