MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name **Lysol Brand (Kills 99.9% of Viruses & Bacteria) Concentrate Disinfectant**

UPC CODES Refer to section 16

CAS # Mixture

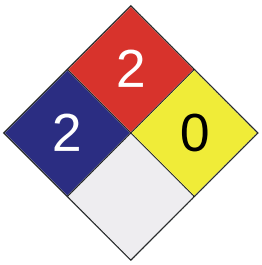
Product use Disinfectant

Distributed by

Reckitt Benckiser
Morris Corporate Center IV
399 Interpace Parkway
P.O. Box 225
Parsippany, NJ 07054-0225
In Case of Emergency: 1-800-228-4722
Transportation Emergencies: 24 Hour Number:
North America: CHEMTREC: 1-800-424-9300
Outside North America: 1-703-527-3887

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 2
Flammability	2
Physical Hazard	0
Personal Protection	B



2. Hazards Identification

Emergency overview

This product is regulated by the US EPA as a disinfectant.

PRECAUTIONARY STATEMENTS: Hazards to humans and domestic animals.

DANGER
CORROSIVE. HARMFUL IF SWALLOWED. Causes irreversible eye and skin burns. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). Wear protective clothing and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Avoid prolonged breathing of vapor or mist.

KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects

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

Eyes May cause irreversible eye damage.

Skin Causes burns.
Not expected to be a skin sensitizer.

Inhalation None expected during normal conditions of use.
Do not breathe vapour or spray mist.

Ingestion Harmful if swallowed.

Target organs Blood. Eyes. Liver. Respiratory system. Skin.

Chronic effects The finished product is not expected to have chronic health effects.

Signs and symptoms The product causes burns of eyes, skin and mucous membranes.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
O-Benzyl-p-chlorophenol	120-32-1	2.5 - 10
Potassium hydroxide	1310-58-3	2.5 - 10
Coconut oil	8001-31-8	10 - 20
Ethanol	64-17-5	1 - 2.5
Isopropanol	67-63-0	1 - 2.5
Xylenol	1300-71-6	1 - 2.5

4. First Aid Measures

First aid procedures

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Ingestion Call a doctor or get medical attention immediately. Do not induce vomiting or give anything by mouth to an unconscious person. Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink 1 or 2 glasses of water to dilute product. Avoid alcohol. Get medical attention.

Notes to physician Probable mucosal damage may contraindicate the use of gastric lavage.

General advice Keep away from sources of ignition. No smoking. 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. Fire Fighting Measures

Flammable properties Combustible by OSHA criteria.

Extinguishing media

Suitable extinguishing media Carbon dioxide. Water spray. Dry chemical.

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.

Explosion data

Sensitivity to mechanical impact Not available

Sensitivity to static discharge Not available

6. Accidental Release Measures

Personal precautions 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.

Methods for containment Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up Remove sources of ignition. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

7. Handling and Storage

Handling

Avoid breathing vapors or mists of this product.
Do not ingest.
Do not get this material in your eyes, on your skin, or on your clothing.
Wear protective eyewear (goggles, face shield or safety glasses).
Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet.
Remove and wash contaminated clothing before reuse.

Storage

Do not store at temperatures above 120°F (49°C).
Store in original container in areas inaccessible to small children.
Do not reuse container.
Food contact surfaces must be rinsed with potable water.

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
Coconut oil	**ACGIH-TLV** Mist: 5 mg/m3 **OSHA-PEL** Not established
Ethanol	**ACGIH-TLV** TWA: 1000 ppm STEL: 1000 ppm **OSHA-PEL** TWA: 1000 ppm
Isopropanol	**ACGIH-TLV** TWA: 200 ppm STEL: 400 ppm **OSHA-PEL** TWA: 400 ppm
O-Benzyl-p-chlorophenol	**ACGIH-TLV** Not established **OSHA-PEL** Not established
Potassium hydroxide	**ACGIH-TLV** Ceiling: 2 mg/m3 **OSHA-PEL** Not established
Xylenol	**ACGIH-TLV** Not established **OSHA-PEL** Not established

Engineering controls

General ventilation normally adequate.

Personal protective equipment

Eye / face protection

Avoid contact with eyes. If splashing is likely to occur or for occupational exposures, wear appropriate eye protection.
When handling in large quantities or responding to emergency situations, the use of appropriate eye protection is recommended.
Emergency responders should wear full eye and face protection.

Hand protection

Rubber gloves. Confirm with a reputable supplier first.
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.
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	Use good industrial hygiene practices in handling this material. 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	Clear.
Color	Red
Form	aqueous solution
Odor	soapy
Odor threshold	Not available
Physical state	Liquid
pH	10.3 - 11.1
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	145 °F (62.77 °C) Tagliabue
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	> 1
Specific gravity	1.024 - 1.034
Octanol/water coefficient	Not available
Solubility (H2O)	Complete

10. Stability and Reactivity

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Avoid high temperatures. DO NOT MIX WITH BLEACH or use in conjunction with other household products.
Incompatible materials	Caustics. Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Coconut oil	Not available
Ethanol	31623 ppm rat
Isopropanol	16970 mg/l/4h rat
O-Benzyl-p-chlorophenol	Not available
Potassium hydroxide	Not available
Xylenol	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Coconut oil	Not available
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat
Isopropanol	4396 mg/kg rat
O-Benzyl-p-chlorophenol	1700 mg/kg rat; 65 mg/kg mouse
Potassium hydroxide	214 mg/kg rat
Xylenol	Not available

Effects of acute exposure

Eye May cause irreversible eye damage.

Skin Causes burns.
Not expected to be a skin sensitizer.

Inhalation None expected during normal conditions of use.
Do not breathe vapour or spray mist.

Ingestion Harmful if swallowed.

Sensitization 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.

ACGIH - Threshold Limit Values - Carcinogens

Ethanol	64-17-5	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Isopropanol	67-63-0	A4 - Not Classifiable as a Human Carcinogen

IARC - Group 3 (Not Classifiable)

Isopropanol	67-63-0	Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977]

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.

Synergistic Materials Not available

12. Ecological Information

Ecotoxicity See below

Ecotoxicity - Freshwater Algae Data

Isopropanol	67-63-0	96 Hr EC50 Desmodesmus subspicatus: >1000 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >1000 mg/L

Ecotoxicity - Freshwater Fish Species Data

Ethanol	64-17-5	96 Hr LC50 Oncorhynchus mykiss: 12.0-16.0 ml/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400-15100 mg/L [flow-through]
Isopropanol	67-63-0	96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 11130 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: >1400000 µg/L
Potassium hydroxide	1310-58-3	96 Hr LC50 Gambusia affinis: 80 mg/L [static]
Xylenol	1300-71-6	48 Hr LC50 Cyprinus carpio: 5 mg/L [static]

Ecotoxicity - Water Flea Data

Ethanol	64-17-5	48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
Isopropanol	67-63-0	48 Hr EC50 Daphnia magna: 13299 mg/L
Xylenol	1300-71-6	24 Hr EC50 water flea: 150 mg/L [Static]

Environmental effects Not available

Aquatic toxicity Not available

Persistence / degradability Not available

Bioaccumulation / accumulation Not available

Partition coefficient Not available

Mobility in environmental media Not available

Chemical fate information Not available

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Do not re-use empty containers. Wrap in newspaper and place in trash. Empty container can be disposed of as household trash or rinsed and recycled where appropriate.

14. Transport Information

U.S. Department of Transportation (DOT)

UN1760 Corrosive Liquid, N.O.S., (Potassium hydroxide, Xylenols), Class 8, PG II, Re-Classed as Consumer Commodity ORM-D

Transportation of Dangerous Goods (TDG - Canada)

UN1760 Corrosive Liquid, N.O.S., (Potassium hydroxide, Xylenols), Class 8, PG II, Limited Quantity. Re-classed as Consumer Commodity/ LTD. QTY.

IMDG (Marine Transport)

UN1760 Corrosive Liquid, N.O.S., (Potassium hydroxide, Xylenols), Class 8, PG II, Limited Quantity

IATA/ICAO (Air)

UN 1760, Corrosive Liquid, N.O.S. (Potassium hydroxide, Xylenols), Class 8, PG II

15. Regulatory Information

US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

Product Registration: Registered with EPA, EPA Reg. No. 777-94

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

Potassium hydroxide	1310-58-3	1000 Lb final RQ; 454 kg final RQ
Xylenol	1300-71-6	1000 Lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Isopropanol	67-63-0	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
O-Benzyl-p-chlorophenol	120-32-1	0.1 % De minimis concentration (Chemical Category N084)

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

Potassium hydroxide	1310-58-3	Present
Xylenol	1300-71-6	Present

U.S. - CWA (Clean Water Act) - Toxic Pollutants

O-Benzyl-p-chlorophenol	120-32-1	Present

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Potassium hydroxide: 1000.0000
Xylenol: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

State regulations

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Isopropanol	67-63-0	Present
O-Benzyl-p-chlorophenol	120-32-1	Present
Potassium hydroxide	1310-58-3	Present
Xylenol	1300-71-6	Present

U.S. - Illinois - Toxic Air Contaminant Carcinogens

O-Benzyl-p-chlorophenol	120-32-1	IARC Group 2B Carcinogen

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

Potassium hydroxide	1310-58-3	1000 Lb final RQ; 454 kg final RQ
Xylenol	1300-71-6	1000 Lb final RQ; 454 kg final RQ

U.S. - Massachusetts - Right To Know List

Ethanol	64-17-5	Teratogen
Isopropanol	67-63-0	Present
Potassium hydroxide	1310-58-3	Present
Xylenol	1300-71-6	Present

U.S. - Minnesota - Hazardous Substance List

Ethanol	64-17-5	Present
Isopropanol	67-63-0	Present
Potassium hydroxide	1310-58-3	Present

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

Ethanol	64-17-5	sn 0844
Isopropanol	67-63-0	sn 1076
Potassium hydroxide	1310-58-3	sn 1571
Xylenol	1300-71-6	sn 2015

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

Potassium hydroxide	1310-58-3	1000 Lb RQ (air); 100 lb RQ (land/water)
Xylenol	1300-71-6	1000 Lb RQ (air); 100 lb RQ (land/water)

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

O-Benzyl-p-chlorophenol	120-32-1	Present

U.S. - Pennsylvania - RTK (Right to Know) List

Ethanol	64-17-5	Present
Isopropanol	67-63-0	Environmental hazard
O-Benzyl-p-chlorophenol	120-32-1	Environmental hazard; Special hazardous substance
Potassium hydroxide	1310-58-3	Environmental hazard
Xylenol	1300-71-6	Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Ethanol	64-17-5	Toxic; Flammable
Isopropanol	67-63-0	Toxic; Flammable
O-Benzyl-p-chlorophenol	120-32-1	Carcinogen
Potassium hydroxide	1310-58-3	Toxic; Flammable

U.S. - Washington - Dangerous Waste - Dangerous Waste Constituents List

O-Benzyl-p-chlorophenol	120-32-1	Present

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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

19200-02201-9 - LYSOL® Brand (Kills 99.9% of Viruses & Bacteria) Concentrate Disinfectant - 12 oz. - Original Scent - 353773

Issue date

08-Jul-2010

Effective date

30-Jun-2010

Prepared by

Reckitt Benckiser Regulatory Department 800-333-3899

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.