RECKITT BENCKISER

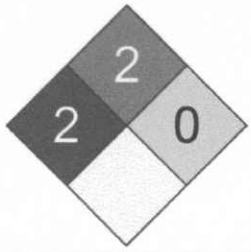
# MATERIAL SAFETY DATA SHEET

## 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<br>Morris Corporate Center IV<br>399 Interpace Parkway<br>P.O. Box 225<br>Parsippany, NJ 07054-0225<br>In Case of Emergency: 1-800-228-4722<br>Transportation Emergencies: 24 Hour Number:<br>North America: CHEMTREC: 1-800-424-9300<br>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.<br>Not expected to be a skin sensitizer. |
| **Inhalation** | None expected during normal conditions of use.<br>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**<br>Mist: 5 mg/m3<br>**OSHA-PEL**<br>Not established |
| Ethanol | **ACGIH-TLV**<br>TWA: 1000 ppm<br>STEL: 1000 ppm<br>**OSHA-PEL**<br>TWA: 1000 ppm |
| Isopropanol | **ACGIH-TLV**<br>TWA: 200 ppm<br>STEL: 400 ppm<br>**OSHA-PEL**<br>TWA: 400 ppm |
| O-Benzyl-p-chlorophenol | **ACGIH-TLV**<br>Not established<br>**OSHA-PEL**<br>Not established |
| Potassium hydroxide | **ACGIH-TLV**<br>Ceiling: 2 mg/m3<br>**OSHA-PEL**<br>Not established |
| Xylenol | **ACGIH-TLV**<br>Not established<br>**OSHA-PEL**<br>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.<br>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.<br>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.<br>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.<br>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.<br>Wrap in newspaper and place in trash.<br>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. |