1. Product and Company Identification

Product Name: Professional LYSOL® Heavy Duty Bathroom Cleaner Concentrate (Use-dilution 1:32 (4oz./gal.))

UPC CODES: Refer to Section 16

CAS #: Mixture

Product use: Heavy duty cleaner

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

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
Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear protective eye wear (goggles, face shield or safety glasses), protective clothing and rubber gloves. May be harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash before reuse.

KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects:

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

Eyes: Causes eye damage.
Skin: Causes skin burns.
Inhalation: None expected during normal conditions of use.
Ingestion: May be harmful if swallowed.


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

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides</td>
<td>Not Applicable</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>112-34-5</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>68439-46-3</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>64-02-8</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>0.5 - 1.5</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

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**
If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

**Inhalation**
Remove to fresh air.

**Ingestion**
Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

General advice
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**
Not flammable by OSHA criteria.

**Extinguishing media**
- **Suitable extinguishing media:** Water spray. Foam. Dry chemical. Carbon dioxide.
- **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**
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
DANGER
Causes irreversible eye damage and skin burns.
MAY BE HARMFUL IF SWALLOWED.
Do not get in eyes, on skin or on clothing.
Wear protective eye wear (goggles, face shield or safety glasses), protective clothing and rubber gloves.
Remove and wash contaminated clothing before re-use.

Storage
Do not contaminate water, food or feed by storage or disposal.
Store in original container in areas inaccessible to small children.
Keep securely closed.

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

8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Exposure limits</th>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>ACGIH-TLV</td>
<td>Not established</td>
</tr>
<tr>
<td>Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides</td>
<td>ACGIH-TLV</td>
<td>Not established</td>
</tr>
<tr>
<td>Ethanol</td>
<td>ACGIH-TLV</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>TWA: 1000 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STEL: 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>ACGIH-TLV</td>
<td>Not established</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>ACGIH-TLV</td>
<td>Not established</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>ACGIH-TLV</td>
<td>Ceiling: 2 mg/m3</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA: 2 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>ACGIH-TLV</td>
<td>Not established</td>
</tr>
<tr>
<td>Engineering controls</td>
<td>ACGIH-TLV</td>
<td>Not established</td>
</tr>
<tr>
<td>Personal protective equipment</td>
<td>OSHA-PEL</td>
<td>Not established</td>
</tr>
<tr>
<td>Eye / face protection</td>
<td>OSHA-PEL</td>
<td>TWA: 15 mg/m3</td>
</tr>
<tr>
<td>Hand protection</td>
<td>OSHA-PEL</td>
<td>TWA: 15 mg/m3</td>
</tr>
<tr>
<td>Wear chemical goggles. Emergency responders should wear full eye and face protection.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber gloves. Confirm with a reputable supplier first. Emergency responders should wear impermeable gloves.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Color</td>
<td>Blue / Green</td>
</tr>
<tr>
<td>Form</td>
<td>aqueous solution</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>12.85 (Basic)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Pour point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 199.99 °F (&gt; 93.33 °C) Tagliabue</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.02 @ 25°C</td>
</tr>
<tr>
<td>Octanol/water coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Complete</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
DO NOT MIX WITH BLEACH or use in conjunction with other household products.

Incompatible materials

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

<table>
<thead>
<tr>
<th>Component analysis - LC50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredient(s)</td>
<td></td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>5 mg/l/4h rat</td>
</tr>
<tr>
<td>Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides</td>
<td>Not available</td>
</tr>
<tr>
<td>Ethanol</td>
<td>31623 ppm rat</td>
</tr>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>Not available</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>400 mg/m3 guinea pig</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Not available</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>Not available</td>
</tr>
</tbody>
</table>

#20559 08-Jul-2010
### Component analysis - Oral LD50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>1200 mg/kg rat</td>
</tr>
<tr>
<td>Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides</td>
<td>426 mg/kg rat</td>
</tr>
<tr>
<td>Ethanol</td>
<td>3450 mg/kg mouse; 7060 mg/kg rat</td>
</tr>
<tr>
<td>Ethanol, 2-(2-butoxyethoxy)-</td>
<td>2000 mg/kg guinea pig; 3384 mg/kg rat; 2200 mg/kg rabbit</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>4090 mg/kg rat</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Not available</td>
</tr>
<tr>
<td>Tetrasodium ethylenediamine tetraacetate</td>
<td>2000 mg/kg rat</td>
</tr>
</tbody>
</table>

### Effects of acute exposure

- **Eye**: Causes eye damage.
- **Skin**: Causes skin burns.
- **Inhalation**: None expected during normal conditions of use.
- **Ingestion**: May be 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

### 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 - Freshwater Algae Data**

- Ethanol, 2-(2-butoxyethoxy)-: 112-34-5 Hr EC50 Desmodesmus subspicatus: >100 mg/L
- Sodium carbonate: 497-19-8 120 Hr EC50 Nitzschia: 242 mg/L
- Tetrasodium ethylenediamine tetraacetate: 64-02-8 72 Hr EC50 Desmodesmus subspicatus: 1.01 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]
- Ethanol, 2-(2-butoxyethoxy)-: 112-34-5 96 Hr LC50 Lepomis macrochirus: 1300 mg/L [static]
- Sodium carbonate: 497-19-8 96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]; 96 Hr LC50 Pimephales promelas: <310-1220 mg/L [static]
- Sodium hydroxide: 1310-73-2 96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static]
- Tetrasodium ethylenediamine tetraacetate: 64-02-8 96 Hr LC50 Lepomis macrochirus: 41 mg/L [static]; 96 Hr LC50 Pimephales promelas: 59.8 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]
- Ethanol, 2-(2-butoxyethoxy)-: 112-34-5 24 Hr EC50 Daphnia magna: 2850 mg/L; 48 Hr EC50 Daphnia magna: >100 mg/L
- Sodium carbonate: 497-19-8 48 Hr EC50 Daphnia magna: 265 mg/L
- Tetrasodium ethylenediamine tetraacetate: 64-02-8 24 Hr EC50 Daphnia magna: 610 mg/L

### 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

<table>
<thead>
<tr>
<th>Waste codes</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal instructions</td>
<td>Dispose in accordance with all applicable regulations.</td>
</tr>
</tbody>
</table>

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

<table>
<thead>
<tr>
<th>Waste from residues / unused products</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated packaging</td>
<td>Not available</td>
</tr>
</tbody>
</table>

14. Transport Information

U.S. Department of Transportation (DOT)

UN 1760, Corrosive Liquid, NOS (Alkyl Dimethyl Benzyl Ammonium Chloride, Sodium Hydroxide) Class 8, PG III, Limited Quantity, Reclassed as Consumer Commodity ORM-D

Transportation of Dangerous Goods (TDG - Canada)

UN 1760, Corrosive Liquid, NOS (Alkyl Dimethyl Benzyl Ammonium Chloride, Sodium Hydroxide), Class 8, PG III, Limited Quantity
15. Regulatory Information

US Federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Product Registration: Registered with EPA, EPA Reg. No. 675-54

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Sodium hydroxide 1310-73-2 1000 Lb final RQ; 454 kg final RQ

U.S. - CWA (Clean Water Act) - Hazardous Substances
Sodium hydroxide 1310-73-2 Present

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity
Sodium hydroxide: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
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

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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

Sodium hydroxide 1310-73-2 Present

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

Sodium hydroxide 1310-73-2 1000 Lb final RQ; 454 kg final RQ

U.S. - Massachusetts - Right To Know List

Ethanol 64-17-5 Teratogen
Sodium hydroxide 1310-73-2 Present

Ethanol 64-17-5 Present
Sodium hydroxide 1310-73-2 Present

U.S. - Minnesota - Hazardous Substance List

Ethanol 64-17-5 Present
Sodium hydroxide 1310-73-2 Present

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

Ethanol 64-17-5 sn 0844
Sodium hydroxide 1310-73-2 sn 1706

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

Sodium hydroxide 1310-73-2 1000 Lb RQ (air); 100 lb RQ (land/water)

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

Ethanol 64-17-5 Present
Sodium hydroxide 1310-73-2 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Ethanol 64-17-5 Toxic; Flammable
Sodium hydroxide 1310-73-2 Toxic; Flammable

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

36241-94201-4 - Professional LYSOL® Heavy Duty Bathroom Cleaner Concentrate (Use-dilution 1:32 (4oz./gal.)) - 1 gal. - 355385

Issue date 08-Jul-2010
Effective date 01-Jul-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.