1. Product and Company Identification

Product Name: LYSOL® Brand Disinfectant Power Toilet Bowl Cleaner with Lime and Rust Remover

UPC CODES Refer to Section 16

CAS #: Mixture

Product use: Toilet bowl cleaner

Manufacturer: 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

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 3</td>
<td>0</td>
<td>1</td>
<td>D</td>
</tr>
</tbody>
</table>

2. Hazards Identification

Emergency overview
DANGER
CORROSIVE TO EYES AND SKIN
This product may be harmful or fatal if swallowed. Avoid contact with eyes, skin or clothing. Avoid breathing mists or vapors. Fumes are corrosive to metal.

Keep out of reach of children.

Potential short term health effects
Routes of exposure
Eye, Skin contact, Inhalation, Ingestion.

Eyes
Causes chemical burns. May cause blindness.

Skin
Causes chemical burns.

Inhalation
May cause respiratory tract irritation or chemical burns.

Ingestion
Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

Target organs
Eyes. Respiratory system. Skin.

Chronic effects
Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

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>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>68551-12-2</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Ethoxylated aliphatic amines</td>
<td>61791-26-2</td>
<td>1 - 2.5</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**
Immediately flush with cool water for 20 minutes while removing contaminated clothing and shoes. Discard or wash well before reuse. Obtain medical attention if irritation persists.

**Inhalation**
If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion**
Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

**Notes to physician**
If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately. Symptoms may be delayed.

**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.

5. Fire Fighting Measures

**Flammable properties**
Not flammable by OSHA criteria.

**Extinguishing media**
Suitable extinguishing media: Dry chemical. Water spray. Foam.

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: Hydrogen chloride. 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. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

**Handling**
Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.

**Storage**
Keep out of the reach of children. Store in a closed container away from incompatible materials.
8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td></td>
</tr>
<tr>
<td>Exposure limits</td>
<td></td>
</tr>
<tr>
<td>Ingredient(s)</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>OSHA-PEL</td>
<td>Not established</td>
</tr>
<tr>
<td>Ethoxylated aliphatic amines</td>
<td></td>
</tr>
<tr>
<td>Exposure limits</td>
<td></td>
</tr>
<tr>
<td>Ingredient(s)</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>OSHA-PEL</td>
<td>Not established</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td></td>
</tr>
<tr>
<td>Exposure limits</td>
<td></td>
</tr>
<tr>
<td>Ingredient(s)</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Ceiling: 2 ppm</td>
</tr>
<tr>
<td>OSHA-PEL</td>
<td>Ceiling: 5 ppm</td>
</tr>
</tbody>
</table>

Engineering controls

General ventilation normally adequate.

Personal protective equipment

- **Eye / face protection**
  - Wear chemical goggles.
  - 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**
  - Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.
- **Respiratory protection**
  - Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
  - 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**
  - Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Wintergreen</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>&lt; 1 (Acidic)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Pour point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93.33 °C (&gt; 200 °F) Tagliabue</td>
</tr>
<tr>
<td>Evaporation rate</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>Not available</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 other chemicals. Reacts violently with alkaline material. This product may react with reducing agents. Fumes are corrosive to metal.

**Incompatible materials**
Bases. Reducing agents.

**Hazardous decomposition products**
May include and are not limited to:

**Possibility of hazardous reactions**
Hazardous polymerization does not occur.

11. Toxicological Information

**Acute effects**
Acute LD50: 1350 mg/kg, Rat, Oral
Acute LD50: >2000 mg/kg, Rabbit, Dermal

**Component analysis - LC50**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>Not available</td>
</tr>
<tr>
<td>Ethoxylated aliphatic amines</td>
<td>Not available</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>935 ppm mouse; 3124 mg/l/4h rat</td>
</tr>
</tbody>
</table>

**Component analysis - Oral LD50**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>1380 mg/kg rat</td>
</tr>
<tr>
<td>Ethoxylated aliphatic amines</td>
<td>620 mg/kg rat</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>900 mg/kg rabbit; 700 mg/kg rat</td>
</tr>
</tbody>
</table>

**Effects of acute exposure**

Eye: Causes chemical burns. May cause blindness.

Skin: Causes chemical burns.

Inhalation: May cause respiratory tract irritation or chemical burns.

Ingestion: Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

**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**
Hydrogen chloride 7647-01-0 A4 - Not Classifiable as a Human Carcinogen

**IARC - Group 3 (Not Classifiable)**
Hydrogen chloride 7647-01-0 Monograph 54 [1992]

**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**
Bulk quantities, if spilled, may be toxic to aquatic organisms, fish, birds and mammals. Control and clean up all exterior spills and prevent liquid from entering any streams, rivers, lakes and all other bodies of water.

**Ecotoxicity - Freshwater Fish Species Data**
Hydrogen chloride 7647-01-0 96 Hr LC50 Gambusia affinis: 282 mg/L [static]

**Environmental effects**
Not available

**Aquatic toxicity**
Not available

**Persistence / degradability**
Not available

**Bioaccumulation / accumulation**
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>
<tr>
<td>Waste from residues / unused products</td>
<td>Not available</td>
</tr>
<tr>
<td>Contaminated packaging</td>
<td>Not available</td>
</tr>
</tbody>
</table>

14. Transport Information

U.S. Department of Transportation (DOT)

UN 1789, Hydrochloric Acid Solution, Class 8, PG II,
    Re-Classed as Consumer Commodity ORM-D

Transportation of Dangerous Goods (TDG - Canada)

UN 1789, Hydrochloric Acid Solution, Class 8, PG II,
    Re-Classed as Consumer Commodity / Limited Quantity

IMDG (Marine Transport)

UN 1789, Hydrochloric Acid Solution, Class 8, PG II, 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. All components are on the U.S. EPA TSCA Inventory List.

### EPA Registration No. - 777-81

<table>
<thead>
<tr>
<th>Substance</th>
<th>EPA Registration No.</th>
<th>Reportable Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>5000 Lb final RQ; 2270 kg final RQ</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>EPA Registration No.</th>
<th>EPCRA RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>500 Lb TPQ (gas only)</td>
</tr>
</tbody>
</table>

### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

<table>
<thead>
<tr>
<th>Substance</th>
<th>EPA Registration No.</th>
<th>EPCRA RQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>5000 Lb EPCRA RQ (gas only)</td>
</tr>
</tbody>
</table>

### U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

<table>
<thead>
<tr>
<th>Substance</th>
<th>EPA Registration No.</th>
<th>TPQs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>500 Lb TPQ (gas only)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>EPA Registration No.</th>
<th>Emission Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)</td>
</tr>
</tbody>
</table>

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

Hydrogen chloride: Present

### (OSHA)

29 CFR 1910.1200 hazardous chemical: Yes

### CERCLA (Superfund) reportable quantity

Hydrogen chloride: 5000.0000

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

<table>
<thead>
<tr>
<th>Hazard categories</th>
<th>Immediate Hazard</th>
<th>Delayed Hazard</th>
<th>Fire Hazard</th>
<th>Pressure Hazard</th>
<th>Reactivity Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### 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
Hydrogen chloride 7647-01-0 Present

U.S. - Illinois - Toxic Air Contaminants
Hydrogen chloride 7647-01-0 Present (aerosol)

U.S. - Louisiana - Reportable Quantity List for Pollutants
Hydrogen chloride 7647-01-0 5000 Lb RQ (applies to unauthorized emissions based on total mass emitted into or onto all media within any consecutive 24-hour period); 1000 lb RQ (applies to unauthorized emissions based on total mass emitted into the atmosphere)

U.S. - Massachusetts - Right To Know List
Hydrogen chloride 7647-01-0 Extraordinarily hazardous

U.S. - Minnesota - Hazardous Substance List
Hydrogen chloride 7647-01-0 Present

U.S. - New Jersey - Right to Know Hazardous Substance List
Hydrogen chloride 7647-01-0 sn 1012

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
Hydrogen chloride 7647-01-0 5000 Lb RQ (air); 100 lb RQ (land/water)

U.S. - North Carolina - Control of Toxic Air Pollutants
Hydrogen chloride 7647-01-0 0.7 mg/m3 (acute irritants)

U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities
Hydrogen chloride 7647-01-0 500 Lb TQ (gas only)

U.S. - Pennsylvania - RTK (Right to Know) List
Hydrogen chloride 7647-01-0 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List
Hydrogen chloride 7647-01-0 Toxic; Flammable

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Reportable Quantities
Hydrogen chloride 7647-01-0 5000 Lb RQ (gas)

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Threshold Planning Quantities
Hydrogen chloride 7647-01-0 500 Lb TPQ (gas)

Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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.

Recommended use

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

Further information

19200-80088-LYSOL® Brand Disinfectant Power Toilet Bowl Cleaner with Lime and Rust Remover -24 oz.
FORMULA NUMBER 353846
EPA Registration No. - 777-81

Issue date

30-Oct-2009

Effective date

31-Oct-2009

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.