1. Product and Company Identification

Product Name: LYSOL Brand II Disinfectant Deep Reach Toilet Bowl Cleaner

UPC CODES Refer to Section 16

CAS #

Product Use: Toilet bowl cleaner

Manufacturer: Reckitt Benckiser (Canada) Inc.

1680 Tech Avenue Unit #2

Mississauga, ON L4W 5S9

In Case of Emergency: 1-800-888-0192

Transportation Emergencies: 24 Hour Number:

North America: CHEMTREC: 1-800-424-9300

Outside North America: 1-703-527-3887

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 vapours. Fumes are corrosive to metal.

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>Methyl salicylate</td>
<td>119-36-8</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Ethoxylated aliphatic amines</td>
<td>61791-26-2</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>68551-12-2</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>7 - 13</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

<table>
<thead>
<tr>
<th>Flammable properties</th>
<th>Not flammable by WHMIS criteria.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extinguishing media</td>
<td></td>
</tr>
<tr>
<td>Suitable extinguishing media</td>
<td>Dry chemical. Water spray. Foam.</td>
</tr>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Not available</td>
</tr>
<tr>
<td>Protection of firefighters</td>
<td></td>
</tr>
<tr>
<td>Specific hazards arising from the chemical</td>
<td>Not available</td>
</tr>
<tr>
<td>Protective equipment for firefighters</td>
<td>Firefighters should wear full protective clothing including self contained breathing apparatus.</td>
</tr>
<tr>
<td>Hazardous combustion products</td>
<td>May include and are not limited to: Hydrogen chloride. Oxides of carbon.</td>
</tr>
<tr>
<td>Explosion data</td>
<td></td>
</tr>
<tr>
<td>Sensitivity to mechanical impact</td>
<td>Not available</td>
</tr>
<tr>
<td>Sensitivity to static discharge</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 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>Exposure limit values</th>
<th>Ingredient(s)</th>
<th>ACGIH-TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alcohols, C12-16, ethoxylated</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Ethoxylated aliphatic amines</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>Hydrochloric acid</td>
<td>Ceiling: 2 ppm</td>
</tr>
<tr>
<td></td>
<td>Methyl salicylate</td>
<td>Not established</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

- **Appearance**: Clear.
- **Colour**: Blue
- **Form**: Liquid
- **Odour**: Wintergreen
- **Odour threshold**: Not available
- **Physical state**: Liquid
- **pH**: < 1 (Acidic)
- **Freezing point**: Not available
- **Boiling point**: Not available
- **Pour point**: Not available
- **Flash point**: > 93.33 °C (> 200 °F) Tagliabue
- **Evaporation Rate**: Not available
- **Flammability limits in air, lower, % by volume**: Not available
- **Flammability Limits in Air, Upper, % by Volume**: Not available
- **Vapour pressure**: Not available
- **Vapour density**: Not available
- **Specific gravity**: Not available
- **Octanol/water coefficient**: Not available
- **Solubility (H2O)**: Complete
- **Auto-ignition temperature**: Not available
- **Viscosity**: Viscous
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 polymerisation 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>Hydrochloric acid</td>
<td>935 ppm mouse; 3124 mg/l/4h rat</td>
</tr>
<tr>
<td>Methyl salicylate</td>
<td>Not available</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>Hydrochloric acid</td>
<td>900 mg/kg rabbit; 700 mg/kg rat</td>
</tr>
<tr>
<td>Methyl salicylate</td>
<td>887 mg/kg rat; 1110 mg/kg mouse; 2100 mg/kg dog; 1300 mg/kg rabbit; 700 mg/kg guinea pig</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.

**Sensitisation**
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**

<table>
<thead>
<tr>
<th>Hydrochloric acid</th>
<th>7647-01-0</th>
<th>A4 - Not Classifiable as a Human Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC - Group 3 (Not Classifiable)</td>
<td>7647-01-0</td>
<td>Monograph 54 [1992]</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>EC50</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>96 Hr LC50 Gambusia affinis: 282 mg/L [static]</td>
<td></td>
</tr>
<tr>
<td>Methyl salicylate</td>
<td>1 Hr EC50 Bacillus subtilis: 989 mg/L; 16 Hr EC50 Pseudomonas putida: 380 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

**Ecotoxicity - Microtox Data**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>EC50</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl salicylate</td>
<td>119-36-8</td>
<td>24 Hr EC50 Daphnia magna: 50 mg/L</td>
</tr>
</tbody>
</table>

**Ecotoxicity - Water Flea Data**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>EC50</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl salicylate</td>
<td>119-36-8</td>
<td>24 Hr EC50 Daphnia magna: 50 mg/L</td>
</tr>
</tbody>
</table>

#19636 Page 4 of 7 Issue date 21-Oct-2009
Environmental effects Not available
Aquatic toxicity Not available
Persistence and degradability Not available
Bioaccumulation/accumulation Not available
Partition coefficient Not available
Mobility in environmental media Not available
Chemical fate information Not available
Other adverse effects 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 Not available

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

IATA/ICAO (Air)

UN 1789 - Hydrochloric Acid solution, Class 8, PG II

15. Regulatory Information

Canadian federal regulations
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**Canada - WHMIS - Ingredient Disclosure List**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>1%</td>
</tr>
<tr>
<td>Methyl salicylate</td>
<td>119-36-8</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

**WHMIS classification**
Exempt - Registered product - (DIN 02301326)

**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>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</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**
59631-80892-LYSOL® Brand II Disinfectant Deep Reach Toilet Bowl Cleaner -710mL
FORMULA NUMBER 0099089
DIN 02301326

**Issue date**
21-Oct-2009
For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.