1. Product and company identification

Product name: Professional Lysol Heavy Duty Bathroom Cleaner
Lysol Brand Heavy Duty Cleaner Disinfectant Concentrate

Distributed by: Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Emergency telephone number (Medical): 1-800-338-6167
Emergency telephone number (Transport): 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec: 703-527-3887
Website: http://www.rbnainfo.com

Product use: Bathroom cleaning (liquid)

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS #: 355385PSDS v3.0
Formulation #: 935-105 (355385 v10.0)
EPA ID No.: 675-54
UPC Code / Sizes: HDPE Bottle

2. Hazards identification

Classification of the substance or mixture:
SKIN CORROSION - Category 1
SERIOUS EYE DAMAGE - Category 1

GHS label elements
Hazard pictograms:

Signal word: Danger
Hazard statements: Causes severe skin burns and eye damage.
2. Hazards identification

Precautionary statements

General: Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention: Wash hands thoroughly after handling. Wear protective gloves. Wear protective clothing. Wear eye or face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements: None known.

Hazards not otherwise classified: None known.

3. Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>5 - 10</td>
<td>112-34-5</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>2.5 - 5</td>
<td>68424-85-1</td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>1 - 2.5</td>
<td>68439-46-3</td>
</tr>
<tr>
<td>Tetrasodium ethylene diamine tetraacetate</td>
<td>1 - 2.5</td>
<td>64-02-8</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1 - 2.5</td>
<td>64-17-5</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>0.1 - 1</td>
<td>497-19-8</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Description of necessary first aid measures

Eye contact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed
4. First aid measures

Skin contact: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Causes serious eye damage.
Inhalation: No known significant effects or critical hazards.
Skin contact: Causes severe burns.
Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:
pain
watering
redness
Inhalation: No specific data.
Skin contact: Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
Ingestion: Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments: No specific treatment.
Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)
5. Fire-fighting measures

**Extinguishing media**
- **Suitable extinguishing media**: Use an extinguishing agent suitable for the surrounding fire.
- **Unsuitable extinguishing media**: None known.

**Specific hazards arising from the chemical**
- **Decomposition products**: In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**
- Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide
  - Nitrogen oxides
  - Metal oxide/oxides

**Special protective actions for fire-fighters**
- Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**
- Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**
- No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**
- If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**
- Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**

**Small spill**
- Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**
- Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>ACGIH TLV (United States, 4/2014). TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor</td>
</tr>
<tr>
<td></td>
<td>ACGIH TLV (United States, 3/2015). STEL: 1000 ppm 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 1900 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>ethanol</td>
<td>NIOSH REL (United States, 10/2013).</td>
</tr>
<tr>
<td></td>
<td>TWA: 1000 ppm 10 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 1900 mg/m³ 10 hours.</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (United States, 2/2013).</td>
</tr>
<tr>
<td></td>
<td>TWA: 1000 ppm 8 hours.</td>
</tr>
<tr>
<td></td>
<td>TWA: 1900 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

Appropriate engineering controls: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
8. Exposure controls/personal protection

**Eye/face protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin protection**

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

9. Physical and chemical properties

**Appearance**

**Physical state**: Liquid. [Clear.]

**Color**: Blue. Green.

**Odor**: Citrus Floral.

**Odor threshold**: Not available.

**pH**: 12.6 to 13.1 [Conc. (% w/w): 100%]

**Melting point**: Not available.

**Boiling point**: Not available.

**Flash point**: Closed cup: >93.3°C (>199.9°F)

**Evaporation rate**: Not available.

**Flammability (solid, gas)**: Not available.

**Lower and upper explosive (flammable) limits**: Not available.

**Vapor pressure**: Not available.

**Vapor density**: Not available.

**Relative density**: 1.02 g/cm³ [20 to 25°C]

**Solubility**: Easily soluble in the following materials: cold water and hot water.

**Partition coefficient: n-octanol/water**: Not available.

**Auto-ignition temperature**: Not available.

**Decomposition temperature**: Not available.

**Viscosity**: Not available.
9. Physical and chemical properties

Flow time (ISO 2431) : Not available.

10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: acids

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2700 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2848 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>3413 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>344 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>398 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1378 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>10 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated tetrasodium ethylene diamine tetraacetate ethanol</td>
<td>LC50 Oral</td>
<td>Rat</td>
<td>124700 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>7 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2800 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>*Professional Lysol Heavy Duty Bathroom Cleaner</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>&gt;2.18 mg/l</td>
<td>7 days</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;5050 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary : Not classified * Information is based on toxicity test result of a similar product.

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>20 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>25 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides tetrasodium ethylene diamine tetraacetate</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>
11. Toxicological information

<table>
<thead>
<tr>
<th>Substance</th>
<th>Route of Exposure</th>
<th>Species</th>
<th>Time</th>
<th>Concentration</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 microliters</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Sodium carbonate</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>400 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.5 minutes 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>*Professional Lysol Heavy Duty Bathroom Cleaner</td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**

**Skin**: Severely irritating to the skin. *Information is based on toxicity test result of a similar product.

**Eyes**: Severely irritating to eyes. *Information is based on toxicity test result of a similar product.

**Respiratory**: Based on available data, the classification criteria are not met.

**Sensitization**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>skin</td>
<td>Guinea pig</td>
<td>Not sensitizing</td>
</tr>
<tr>
<td>*Professional Lysol Heavy Duty Bathroom Cleaner</td>
<td>skin</td>
<td>In vivo</td>
<td>Not sensitizing</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**

**Skin**: Non-sensitizer to skin. *Information is based on toxicity test result of a similar product.

**Respiratory**: Based on available data, the classification criteria are not met.

**Mutagenicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Experiment</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>OECD 471 - Bacterial Reverse Mutation Test</td>
<td>Experiment: In vitro Subject: Bacteria</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>OECD 473 - Mammalian Chromosomal Aberration Test</td>
<td>Experiment: In vitro Subject: Mammalian-Animal</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>OECD 476 - Mammalian</td>
<td>Experiment: In vitro Subject: -</td>
<td>Negative</td>
</tr>
</tbody>
</table>

**Code #**: FF355385  
**SDS #**: 355385PSDS v3.0  
**Date of issue**: 13/06/2017  
**8/15**
11. Toxicological information

<table>
<thead>
<tr>
<th>Cell Gene Mutation Test</th>
<th>Subject: Mammalian-Animal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conclusion/Summary</strong> : Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong> : Not available.</td>
<td></td>
</tr>
<tr>
<td><strong>Conclusion/Summary</strong> : Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
</tbody>
</table>

**Classification**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Teratogenicity**

Not available.

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on the likely routes of exposure**

Not available.

**Potential acute health effects**

- **Eye contact** : Causes serious eye damage.
- **Inhalation** : No known significant effects or critical hazards.
- **Skin contact** : Causes severe burns.
- **Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

- **Eye contact** : Adverse symptoms may include the following:
  - pain
  - watering
  - redness

- **Inhalation** : No specific data.

- **Skin contact** : Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur

- **Ingestion** : Adverse symptoms may include the following:
  - stomach pains
11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
- Potential immediate effects: Not available.
- Potential delayed effects: Not available.

Long term exposure
- Potential immediate effects: Not available.
- Potential delayed effects: Not available.

Potential chronic health effects
Not available.

Conclusion/Summary: Based on available data, the classification criteria are not met.

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates
Not available.

12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>Acute LC50 1300000 µg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 0.016 mg/l</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>Acute LC50 64 ppb Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic EC 10 0.009 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 5.36 mg/l Fresh water</td>
<td>Crustaceans - Ceriodaphnia dubia - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2686 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 8500 µg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 486000 µg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</td>
</tr>
<tr>
<td>Alcohols, C9-11, ethoxylated</td>
<td>Acute EC50 17.921 mg/l Marine water</td>
<td>Algae - Ulva pertusa</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 25500 µg/l Marine water</td>
<td>Crustaceans - Artemia</td>
<td>48 hours</td>
</tr>
</tbody>
</table>

Code # : FF355385 (355385PSDS) US

Date of issue : 13/06/2017 10/15

SDS # : 355385PSDS v3.0
12. Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Acute LC50 42000 µg/l Fresh water</th>
<th>Chronic NOEC 4.995 mg/l Marine water</th>
<th>franciscana - Larvae Fish - Oncorhynchus mykiss Algae - Ulva pertusa Daphnia - Daphnia magna - Neonate</th>
<th>Acute EC50 242000 µg/l Fresh water Acute LC50 176000 µg/l Fresh water Acute LC50 265000 µg/l Fresh water Acute LC50 300000 µg/l Fresh water</th>
<th>Algae - Navicula seminulum Crustaceans - Amphipoda Daphnia - Daphnia magna Fish - Lepomis macrochirus</th>
<th>4 days 96 hours 21 days 96 hours 48 hours 48 hours 96 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium carbonate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>1</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>tetrasodium ethylene diamine tetraacetate</td>
<td>5.01</td>
<td>1.8</td>
<td>low</td>
</tr>
<tr>
<td>ethanol</td>
<td>-0.35</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

- Soil/water partition coefficient (K_{OC}): Not available.

Other adverse effects

No known significant effects or critical hazards.

Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
### 14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>UN1760</td>
<td>Corrosive liquids, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, sodium hydroxide)</td>
<td>8</td>
<td>III</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>TDG Classification</td>
<td>UN1760</td>
<td>CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, sodium hydroxide). Marine pollutant (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, Alcohols, C9-11, ethoxylated)</td>
<td>8</td>
<td>III</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>Mexico Classification</td>
<td>UN1760</td>
<td>LIQUIDO CORROSIVO, N.E.P. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, sodium hydroxide)</td>
<td>8</td>
<td>III</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>IMDG Class</td>
<td>UN1760</td>
<td>CORROSIVE LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, Sodium Hydroxide).</td>
<td>8</td>
<td>III</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>IATA-DGR Class</td>
<td>UN1760</td>
<td>Corrosive liquid, n.o.s. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, sodium hydroxide)</td>
<td>8</td>
<td>III</td>
<td></td>
<td>See DG List.</td>
</tr>
</tbody>
</table>

**Special precautions for user**: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**PG***: Packing group

**Code #**: FF355385 (355385PSDS) US

**SDS #**: 355385PSDS v3.0

**Date of issue**: 13/06/2017

**12/15**
15. Regulatory information

**U.S. Federal regulations**
- **TSCA 4(a) proposed test rules**: Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides
- **TSCA 8(a) PAIR**: 1,1’-oxydipropan-2-ol; α-hexylcinnamaldehyde
- **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined
- **United States inventory (TSCA 8b)**: All components are listed or exempted.
- **Clean Water Act (CWA) 311**: sodium hydroxide

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)**
- Not listed

**Clean Air Act Section 602 Class I Substances**: Not listed

**Clean Air Act Section 602 Class II Substances**: Not listed

**DEA List I Chemicals (Precursor Chemicals)**: Not listed

**DEA List II Chemicals (Essential Chemicals)**: Not listed

**SARA 302/304**
- **Composition/information on ingredients**: No products were found.
- **SARA 304 RQ**: Not applicable.

**SARA 311/312 Classification**: Immediate (acute) health hazard

**Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>5 - 10</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>2.5 - 5</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>ethanol</td>
<td>1 - 2.5</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>sodium carbonate</td>
<td>0.1 - 1</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

**SARA 313**

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form R - Reporting requirements</strong></td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>112-34-5</td>
</tr>
<tr>
<td><strong>Supplier notification</strong></td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>112-34-5</td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State regulations**
- **Code #**: FF355385
- **SDS #**: 355385PSDS v3.0
- **Date of issue**: 13/06/2017
15. Regulatory information

Massachusetts: The following components are listed: ETHYL ALCOHOL; DENATURED ALCOHOL
New York: None of the components are listed.
New Jersey: The following components are listed: GLYCOL ETHERS; ETHYL ALCOHOL; ALCOHOL
Pennsylvania: The following components are listed: GLYCOL ETHERS; DENATURED ALCOHOL; ETHANOL

Canada
WHMIS (Canada): Class D-1B: Material causing immediate and serious toxic effects (Toxic). Class E: Corrosive material

Canadian lists
Canadian NPRI: The following components are listed: Diethylene glycol butyl ether; Ethanol
CEPA Toxic substances: None of the components are listed.
Canada inventory: All components are listed or exempted.

Label elements
Signal word: Danger
Hazard statements: Corrosive. Causes irreversible eye damage. Causes burns. May be harmful if swallowed.
Precautionary measures: Do not get in eyes, on skin or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash it before reuse.

16. Other information

Hazardous Material Information System (U.S.A.):

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>1</td>
<td>D</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.
The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.):

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Health</th>
<th>Instability/Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Code #: FF355385 (355385PSDS) US  SDS #: 355385PSDS v3.0  Date of issue: 13/06/2017
16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Key to abbreviations

ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
UN = United Nations

Date of issue : 13/06/2017  
Date of previous issue : 16/09/2014.  
Version : 3  
Prepared by : Reckitt Benckiser LLC.  
Product Safety Department  
1 Philips Parkway  
Montvale, New Jersey 07646-1810 USA.  
FAX: 201-476-7770  

Revision comments : Update and revision of SDS.  

Notice to reader  

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.

RB is a member of the CSPA Product Care Product Stewardship Program.

Code # : FF355385  
SDS # : 355385PSDS v3.0  
Date of issue : 13/06/2017  

(355385PSDS) US