MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name **LYSOL® Power & Free™ Bathroom Cleaner - Trigger**

CAS # Mixture

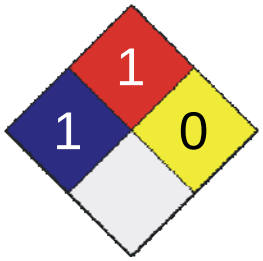
This MSDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the Canadian Workplace Hazardous Materials Information System (WHMIS).
This MSDS is not 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 regulation.

Product Use Bathroom cleaner

Distributed by
Reckitt Benckiser (Canada) Inc.
1680 Tech Avenue Unit #2
Mississauga, ON L4W 5S9
In Case of Emergency: 1-800-338-6167
Transportation Emergencies: 24 Hour Number:
North America: CHEMTREC: 1-800-424-9300
Outside North America: 1-703-527-3887

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 1
Flammability	1
Physical Hazard	0
Personal Protection	B



2. Hazards Identification

Emergency Overview This product is regulated by Health Canada as a disinfectant. Extensive testing has been completed to show that it is safe and effective when used as directed.
Avoid contact with eyes, skin and clothing.

Keep out of reach of children.

Potential short term health effects

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

Eyes Mildly irritating to the eyes.

Skin Slightly irritating to the skin.
Not expected to be a skin sensitizer.

Inhalation None expected during normal conditions of use.

Ingestion Health injuries are not known or expected under normal use.

Target organs Eyes. Respiratory system. Skin.

Chronic effects The finished product is not expected to have chronic health effects.

Signs and symptoms Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Potential environmental effects Components of this product have been identified as having potential environmental concerns.

3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Hydrogen peroxide	7722-84-1	0.5 - 1.5
Citric acid	77-92-9	0.5 - 1.5

4. First Aid Measures

First aid procedures

Eye contact	Check for and remove any contact lenses. If in eyes, IMMEDIATELY rinse eyes with water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes. Get medical attention immediately.
Skin contact	Get medical attention immediately. In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Wash clothing before reuse.
Inhalation	Move exposed person to fresh air. Get medical attention immediately.
Ingestion	Call medical doctor or poison control center immediately. Wash out mouth with water.
Notes to physician	Treat patient symptomatically.
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 WHMIS criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighers	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulphur.
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.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters. Inform the relevant authorities if the product has caused environmental pollution.
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	Ensure adequate ventilation. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Avoid contact with skin and clothing. Avoid contact with eyes. Avoid breathing vapours or mists of this product. Do not ingest. Keep container tightly closed. Wash thoroughly after handling.

Storage	Store in areas inaccessible to small children. Keep securely closed. Refillable. Refill trigger bottle only with this product. If not refilling, discard in trash or offer for recycle. Do not reuse this trigger for any other purpose. Store in a closed container away from incompatible materials. Store in original container, protected from direct sunlight, in a dry, cool, well ventilated area, and away from food and drink. Do not freeze. Store at room temperature. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

8. Exposure Controls / Personal Protection

Exposure limit values

Ingredient(s)	Exposure limit values
Citric acid	**ACGIH-TLV** TWA: 10 mg/m3
Hydrogen peroxide	**ACGIH-TLV** TWA: 1 ppm

Engineering controls	General ventilation normally adequate.
Personal protective equipment	
	Consult the product label for special protection or precautions that have been identified for using this product under directed consumer use conditions. The following recommendations are given for workplace employees, emergency personnel and for other conditions and situations where there is a greater potential for large-scale or prolonged exposure.
Eye / face protection	Not required under normal use conditions. Safety glasses with side-shields or full eye & face protection should be worn if risk assessment indicates this is necessary for the workplace or emergency responders.
Hand protection	Not required under normal use conditions. Chemical resistant, impervious gloves should be worn if risk assessment indicates this is necessary for the workplace or emergency responders.
Skin and body protection	As required by employer code. Usual safety precautions while handling the product will provide adequate protection against injury or irritation. 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	Liquid
Colour	Clear
Form	aqueous solution
Odour	Characteristic
Odour threshold	Not available
Physical state	Liquid
pH	2.1 - 3.5
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation Rate	Not available
Flash point	> 93.3 °C (> 199.94 °F) closed cup
Auto-ignition temperature	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	1.000 - 1.005
Octanol/water coefficient	Not available
Solubility (H2O)	Complete

10. Stability and Reactivity

Reactivity	This product may react with oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not freeze Exposure to moisture. Keep away from extreme heat. DO NOT MIX WITH BLEACH or use in conjunction with other household products.
Incompatible materials	Caustics. Acids. Oxidizers. CORROSIVE TO METALS
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulphur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Citric acid	Not available
Hydrogen peroxide	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
Citric acid	5040 mg/kg mouse; 3000 mg/kg rat
Hydrogen peroxide	75 mg/kg rat; 2000 mg/kg mouse

Effects of acute exposure

Eye	Mildly irritating to the eyes.
Skin	Slightly irritating to the skin. Not expected to be a skin sensitizer.
Inhalation	None expected during normal conditions of use.
Ingestion	Health injuries are not known or expected under normal use.
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.]
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.
Name of Toxicologically Synergistic Products	Not available

12. Ecological Information

Ecotoxicity See below

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

Hydrogen peroxide	7722-84-1	72 Hr EC50 Chlorella vulgaris: 2.5 mg/L

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Citric acid	77-92-9	96 Hr LC50 Lepomis macrochirus: 1516 mg/L [static]
Hydrogen peroxide	7722-84-1	96 Hr LC50 Pimephales promelas: 16.4 mg/L; 96 Hr LC50 Lepomis macrochirus: 18-56 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 10.0-32.0 mg/L [static]

Ecotoxicity - Water Flea - Acute Toxicity Data

Citric acid	77-92-9	72 Hr EC50 Daphnia magna: 120 mg/L
Hydrogen peroxide	7722-84-1	24 Hr EC50 Daphnia magna: 7.7 mg/L; 48 Hr EC50 Daphnia magna: 18 - 32 mg/L [Static]

Persistence and degradability Not available

Bioaccumulation/accumulation Not available

Mobility in environmental media Not available

Environmental effects Not available

Aquatic toxicity Not available

Partition coefficient Not available

Chemical fate information Not available

Other adverse effects Not available

13. Disposal Considerations

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 1760, Corrosive liquids, N.O.S. (Citric acid, Hydrogen peroxide), Class 8, PG III, Limited Quantity

Transportation of Dangerous Goods (TDG - Canada)

UN 1760, CORROSIVE LIQUID, N.O.S. (CITRIC ACID, HYDROGEN PEROXIDE), Class 8, PG III, Limited Quantity

IMDG (Marine Transport)

UN 1760, CORROSIVE LIQUID, N.O.S. (Citric acid, Hydrogen peroxide), Class 8, PG III, Limited Quantity

IATA/ICAO (Air)

UN 1760, Corrosive liquid, N.O.S. (Citric acid, Hydrogen peroxide), Class 8, PG III

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.

Product Registration: Registered with TPD, DIN 02382954

All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Canada - WHMIS - Ingredient Disclosure List

Citric acid	77-92-9	1 %
Hydrogen peroxide	7722-84-1	1 %

WHMIS classification

Exempt - Registered product - (DIN 02382954)

Inventory Status

Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

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

LYSOL® Power & Free™ Bathroom Cleaner - Cool Spring Breeze - 22 fl. oz (1 pt. 6 fl. oz.) (650 mL) - 0270327 v1.0

Issue date	21-Aug-2012
Effective Date	21-Aug-2012
Expiry Date	21-Aug-2015
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. This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.