

#### MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

Product Name LYSOL® Power & Free™ Toilet Bowl Cleaner

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 U.S. Government's Occupational Safety and Health Administration (OSHA).

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 Toilet bowl cleaner

Distributed by Reckitt Benckiser

Morris Corporate Center IV 399 Interpace Parkway

P.O. Box 225

Parsippany, NJ 07054-0225

In Case of Emergency: 1-800-338-6167 Transportation Emergencies: 24 Hour Number: North America: CHEMTREC: 1-800-424-9300 Outside North America: 1-703-527-3887







### 2. Hazards Identification

Emergency overview CAUTION

MAY CAUSE EYE IRRITATION. Avoid contact with eyes.

KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects

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

**Eyes** Slightly irritating to the eyes. **Skin** Moderately irritating to the skin.

**Inhalation** Exposure to decomposition products may cause a health hazard.

Serious effects may be delayed following exposure.

IngestionMay be harmful if swallowed.Target organsEyes. Respiratory system. Skin.

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

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and

vomiting.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

environmental concerns.

3. Composition / Inf	ormation on	Inaredients
----------------------	-------------	-------------

Ingredient(s)	CAS#	Percent
C10-16 alkyl ethers, sodium salts	68585-34-2	2.5 - 10
Hydrogen peroxide	7722-84-1	1 - 2.5
Sodium alkylbenzene sulfonate	68411-30-3	1 - 2.5

### 4. First Aid Measures

First aid procedures

Eye contact If in eyes, IMMEDIATELY rinse eyes with water. Remove any contact lenses and

continue rinsing eyes for at least 15 minutes. If irritation occurs, get medical attention.

Skin contact In case of contact, immediately flush skin with plenty of water while removing

contaminated clothing and shoes. Get medical attention if symptoms occur. Wash

clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory

arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms

Call a physician immediately. Wash out mouth with water. Do not induce vomiting unless Ingestion

directed to do so by medical personnel. Never give anything by mouth to an unconscious

person.

Notes to physician

If you feel unwell, seek medical advice (show the label where possible). Ensure that General advice

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.

Treat patient symptomatically.

Extinguishing media

Treat for surrounding material. Suitable extinguishing media

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. Oxides of nitrogen. Oxides of

sulphur.

**Explosion data** 

Sensitivity to mechanical impact Not available Not available Sensitivity to static discharge

#### 6. Accidental Release Measures

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not Personal precautions

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. Methods for containment

Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements

or confined areas.

Before attempting clean up, refer to hazard data given above. Small spills may be Methods for cleaning up

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 to original containers for re-use.

#22549 Page 2 of 7 Issue date 21-Aug-2012 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 vapors or mists of this product.

Do not ingest.

Keep container tightly closed. Wash thoroughly after handling. Do not reuse the empty container.

Storage Store in areas inaccessible to small children. Keep securely closed.

Store in a closed container away from incompatible materials.

Do not freeze.

## 8. Exposure Controls / Personal Protection

Exposure limits		
Ingredient(s)	Exposure Limits	
C10-16 alkyl ethers, sodium salts	ACGIH-TLV	
	Not established	
	OSHA-PEL	
	Not established	
Hydrogen peroxide	ACGIH-TLV	
	TWA: 1 ppm	
	OSHA-PEL	
	TWA: 1 ppm	
Sodium alkylbenzene sulfonate	ACGIH-TLV	
	Not established	
	OSHA-PEL	
	Not established	

**Engineering controls** 

Personal protective equipment

General ventilation normally adequate.

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
Color	Blue

Form aqueous solution

Odor Lavender
Odor threshold Not available
Physical state Liquid
pH 2.83

Freezing point

Boiling point

Not available

Pour point

Not available

Evaporation rate

Not available

Flash point > 199.94 °F (> 93.3 °C) Closed Cup

Auto-ignition temperature Not available Flammability limits in air, lower, % Not available

by volume

Flammability limits in air, upper, %

by volume

Not available

Vapor pressureNot availableVapor densityNot availableSpecific gravity1.022

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 polymerization does not occur. Stable under recommended storage conditions.

Chemical stability
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.

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
C10-16 alkyl ethers, sodium salts	Not available
Hydrogen peroxide	Not available
Sodium alkylbenzene sulfonate	Not available
Component analysis - Oral LD50	
Ingredient(s)	LD50
C10-16 alkyl ethers, sodium salts	1700 mg/kg rat
Hydrogen peroxide	75 mg/kg rat; 2000 mg/kg mouse
1	

Sodium alkylbenzene sulfonate Effects of acute exposure

**Eye** Slightly irritating to the eyes. **Skin** Moderately irritating to the skin.

**Inhalation** Exposure to decomposition products may cause a health hazard.

Serious effects may be delayed following exposure.

404 mg/kg rat

**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.

MutagenicityThe finished product is not expected to have chronic health effects.Reproductive effectsThe finished product is not expected to have chronic health effects.TeratogenicityThe finished product is not expected to have chronic health effects.

Name of Toxicologically Synergistic Not available

**Products** 

## 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

Sodium alkylbenzene sulfonate 68411-30-3 96 Hr EC50 Desmodesmus subspicatus: 9 mg/L; 72 Hr EC50 Pseudokirchneriella

subcapitata: 11 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 4.29 - 12.5 mg/L

**Ecotoxicity - Freshwater Fish - Acute Toxicity Data** 

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]
Sodium alkylbenzene sulfonate 68411-30-3 96 Hr LC50 Brachydanio rerio: 5.1 mg/L [flow-through]; 96 Hr LC50 Brachydanio rerio:

0.6-1.9 mg/L [semi-static]; 96 Hr LC50 Lepomis macrochirus: 2.2 mg/L [static]; 96 Hr LC50 Pimephales promelas: 0.7 mg/L [static]; 96 Hr LC50 Pimephales promelas: 3.4

mg/L; 96 Hr LC50 Oncorhynchus mykiss: 3.8-6.6 mg/L [static]

**Ecotoxicity - Water Flea - Acute Toxicity Data** 

Hydrogen peroxide 7722-84-1 24 Hr EC50 Daphnia magna: 7.7 mg/L; 48 Hr EC50 Daphnia magna: 18 - 32 mg/L

[Static]

Sodium alkylbenzene sulfonate 68411-30-3 48 Hr EC50 Daphnia magna: 0.63 mg/L

Persistence / degradability

Bioaccumulation / accumulation

Mobility in environmental media

Environmental effects

Aquatic toxicity

Partition coefficient

Chemical fate information

Not available

Not available

Not available

# 13. Disposal Considerations

**Disposal instructions** Dispose in accordance with all applicable regulations.

IF EMPTY: Nonrefillable container. Do not reuse or refill the container. Offer for

recycling, if available.

Waste from residues / unused

products

**ERG NO** 

Not available

Contaminated packaging Not available

# 14. Transport Information

UN/ID N.o. Not applicable

U.S. Department of Transportation (DOT): Classification: Not regulated

Not applicable

Proper shipping name Not applicable
U.S. DOT Hazard Class Not applicable
Subsidiary Risk Not applicable
Packing group Not applicable
DOT RQ (lbs) Not applicable

#22549 Page 5 of 7 Issue date 21-Aug-2012

Transportation of Dangerous Goods (TDG - Canada): Classification: Not regulated

Proper shipping nameNot applicableStatusNot applicablePacking groupNot applicable

IMDG (Marine Transport): Classification: Not regulated

Proper shipping name Not applicable
Class Not applicable
Subsidiary Risk Not applicable
Packing group Not applicable
IMDG Page Not applicable

Marine pollutantNot applicableEMSNot applicableMFAGNot applicable

Maximum Quantity Not applicable

IATA/ICAO (Air): Classification: Not regulated

Proper shipping name Not applicable
Class Not applicable
Subsidiary Risk: Not applicable
Packing group Not applicable

Maximum Quantity Not applicable

# 15. Regulatory Information

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous

chemical

Yes

US Federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

Product Registration: Product is compliant with CPSC regulatory guidelines; a specific

registration is not required for this product.

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

Hydrogen peroxide 7722-84-1 1000 Lb EPCRA RQ (concentration >52%)

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

Hydrogen peroxide 7722-84-1 1000 Lb TPQ (concentration >52%)

#### **CERCLA (Superfund) reportable quantity**

Sodium hydroxide: 1000.0000 Sulphuric acid: 1000.0000

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

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes 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

Hydrogen peroxide 7722-84-1 Present

U.S. - Massachusetts - Right To Know List

Hydrogen peroxide 7722-84-1 Extraordinarily hazardous

U.S. - Minnesota - Hazardous Substance List

Hydrogen peroxide 7722-84-1 Present (including Hydrogen peroxide [90%])

**U.S. - New Jersey - Right to Know Hazardous Substance List** Hydrogen peroxide 7722-84-1 sn 1015

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

Hydrogen peroxide 7722-84-1 1 Lb RQ (air); 1 lb RQ (land/water)

U.S. - Ohio - Extremely Hazardous Substances - Threshold Quantities

Hydrogen peroxide 7722-84-1 500 Lb TQ (concentration >52%)

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

Hydrogen peroxide 7722-84-1 Environmental hazard (concentration >52%); Present

U.S. - Rhode Island - Hazardous Substance List

Hydrogen peroxide 7722-84-1 Toxic; Flammable

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Reportable Quantities

Hydrogen peroxide 7722-84-1 1000 Lb RQ

U.S. - Texas - Tier II Chemical Reporting - Extremely Hazardous Substances - Threshold Planning Quantities

Hydrogen peroxide 7722-84-1 1000 Lb TPQ (concentration >52%)

Inventory status

Country(s) or regionInventory nameOn inventory (yes/no)\*United States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

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™ Toilet Bowl Cleaner - 24 fl. oz (1 pt. 8 fl. oz.) (709mL) -

0366230 v1.0

Issue date 21-Aug-2012 Effective date 21-Aug-2012

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.

#22549 Page 7 of 7 Issue date 21-Aug-2012