

MATERIAL SAFETY DATA SHEET

Product name	Professional LYSOL® Brand III Disinfectant Deodorizing Cleaner – Lemon Scent		
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	Disinfectant		
Distributed by	Reckitt Benckiser Morris Corporate Center IV 399 Interpace Parkway 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		
LEGEND	HEALTH / 1		
Severe4Serious3Moderate2Slight1Minimal0	FLAMMABILITY 0 PHYSICAL HAZARD 0 PERSONAL PROTECTION A		
	2. Hazards Identification		
Emergency overview	This product is regulated by the US EPA as a disinfectant.		
	PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS.		
	WARNING Causes substantial but temporary eye injury. Harmful if absorbed through skin. Do not get in eye or on clothing. Avoid contact with skin. Wear protective eyewear (goggles, face shield, safety glasses). Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.		
	KEEP OUT OF REACH OF CHILDREN.		
Potential short term health e	ffects		
Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.		
Eyes	Causes substantial but temporary eye injury.		
Skin	None expected during normal conditions of use. 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. 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	Not available		

3. Composition/Information on Ingredients

Components	CAS #	Percent
Diethylene glycol monobutyl ether	112-34-5	2.5 - 10
Ethanol, 2,2",2""-nitrilotris-	102-71-6	1 - 2.5
Fatty acids, coco, reaction products with ethanolamine, ethoxylated	61791-08-0	1 - 2.5
Sodium citrate	6132-04-3	1 - 2.5
Alkyl (50%C14, 40%C12, 10%C16) dimethyl benzyl ammonium chlorides	Not Applicable	0.8
Octyl Decyl Dimethyl Ammonium Chloride	Not Applicable	0.125
Didecyl Dimethyl Ammonium Chloride	7173-51-5	0.0625
Dioctyl dimethyl ammonium chloride	5538-94-3	0.0625

4. First Aid Measures

First aid procedures	
Eye contact	If in eyes, 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	If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.
Inhalation	None normally required. Remove to fresh air.
Ingestion	Rinse mouth with water. Contact a physician or poison control center if symptoms develop. Do not induce vomiting. NEVER give an unconscious person anything to ingest.
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. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

	5. Fire Fighting Measures	
Flammable properties	Not flammable by OSHA criteria.	
Extinguishing media		
Suitable extinguishing media	Water spray. Foam. Dry chemical. Carbon dioxide.	
Unsuitable extinguishing media	Not available	
Protection of firefighters		
Specific hazards arising from the chemical	Not available	
Protective equipment and precautions 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.	
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. Advise authorities if product has penetrated drains, sewers or water pipes.	
Methods for containment	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.	
ethods for cleaning upBefore attempting clean up, refer to hazard data given above. Small spills may be absorbed non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large from entering sewers or waterways. Contact emergency services and supplier for advice. N return spills to original containers for re-use.		
	7. Handling and Storage	
Handling	Ensure adequate ventilation. WARNING. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Avoid contact with eyes, skin and clothing. MAY BE HARMFUL IF SWALLOWED. Use good industrial hygiene practices in handling this material.	
Storage	Do not contaminate water, food or feed by storage or disposal. Store in original container out of reach of small children. Keep securely closed in a cool, well ventilated area. Do not reuse empty container. Rinse and discard or recycle. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.	
	8. Exposure Controls/Personal Protection	

Components	Туре	Value	Form
Diethylene glycol monobutyl ether (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.
Ethanol, 2,2'',2'''-nitrilotris- (CAS 102-71-6)	TWA	5 mg/m3	
Exposure limits	Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.		
Engineering controls	General ventilation normally adequate.		
Personal protective equipment			
Eye / face protection	using this product under directed co recommendations are given for work conditions and situations where ther exposure. Avoid contact with eyes. Emergency responders should wear ful	place employees, emerge e is a greater potential for	ency personnel and for other
Hand protection	Avoid contact with the skin. Emergency responders should wear impermeable gloves.		
Skin and body protection	As required by employer code. Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible. Usual safety precautions while handling the product will provide adequate protection against injury or irritation.		
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 inhalatio of vapours generated by this product during a spill or other clean-up operations.		
General hygiene considerations	Handle in accordance with good industr When using do not eat or drink. Washing with soap and water after use possible eye irritation from hand contact	is recommended as good h	

9. Physical and Chemical Properties

Appearance	Clear
Color	Green - Yellow
Form	Aqueous solution
Odor	Lemon
Odor threshold	Not available.
Physical state	Liquid.

рН	10.5			
Freezing point	Not available.			
Boiling point	Not available.			
Pour point	Not available.			
Evaporation rate	Not available			
Flash point	> 199.9 °F (> 93.3 °C) Tagliabue			
Auto-ignition temperature	Not available.			
Flammability limits in air, upper, % by volume	Not available.			
Flammability limits in air, lower, % by volume	Not available.			
Vapor pressure	28 mm Hg @ 25°C (for 1:63 dilution)			
Vapor density	Not available.			
Specific gravity	1.013			
Partition coefficient (n-octanol/water)	Not available.			
Solubility (water)	Complete			
Relative density	Not available.			
Viscosity	Not available.			
VOC	Not available	Not available		
Percent volatile	Not available	Not available		
	10. Stability and Reactivity			
Reactivity	This product may react with oxidizing agents.			
Possibility of hazardous reactions	Hazardous polymerization does not occur.			
Chemical stability	Stable under recommended storage conditions.			
Conditions to avoid	DO NOT MIX WITH BLEACH or use in conjunction with other h	ousehold products.		
Incompatible materials	Oxidizers.			
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of	nitrogen.		
	11. Toxicological Information			
Toxicological data				
Components	Species Test Re	sults		
Alkyl (50%C14, 40%C12, 10%C	C16) dimethyl benzyl ammonium chlorides (CAS Not Applicable)			
Acute				
Dermal	D			
LD50	Rat 3346 mg	р/кд		
Oral		1. m		
LD50	Rat 426 mg/	кд		
LC50				
Not available.				
Didecyl Dimethyl Ammonium Ch	hloride (CAS 7173-51-5)			
Acute				
Dermal				

Dermal		
LD50	Rabbit	2730 mg/kg
Inhalation		
LC50	Not available	
Oral		
LD50	Mouse	268 mg/kg
	Rat	84 mg/kg

Components	Species	Test Results		
Diethylene glycol monobutyl	ether (CAS 112-34-5)			
Acute				
Dermal				
LD50	Rabbit	2700 mg/kg		
Inhalation				
LC50	Not available			
Oral				
LD50	Guinea pig	2000 mg/kg		
	Mouse	2400 mg/kg		
	Rabbit	2200 mg/kg		
	Rat			
		3384 mg/kg		
Dioctyl dimethyl ammonium	chloride (CAS 5538-94-3)			
Acute				
Inhalation				
LC50	Not available			
Oral	_			
LD50	Rat	360 mg/kg		
Ethanol, 2,2",2""-nitrilotris- (CAS 102-71-6)			
Acute				
Dermal				
LD50	Rabbit	>= 2000 mg/kg		
Inhalation				
LC50	Not available			
Oral				
LD50	Guinea pig	5300 mg/kg		
	Mouse	5200 mg/kg		
	Rat	4190 mg/kg		
	Nat			
		8 g/kg		
Sodium citrate (CAS 6132-0	4-3)			
Acute				
Dermal				
LD50	Not available			
Inhalation				
LC50	Not available			
Oral				
LD50		> 8000 mg/kg		
Effects of acute exposure				
Eye contact	Causes substantial but temporary	^y eye injury.		
Skin contact	None expected during normal conditions of use.			
Okin contact		Not expected to be a skin sensitizer.		
Inhalation	None expected during normal conditions of use.			
Ingestion	Health injuries are not known or e			
Sensitization		ted to have chronic health effects.		
Chronic effects	The finished product is not expec			
Carcinogenicity		ted to have chronic health effects.		
Mutagenicity	The finished product is not expec			
Reproductive effects	I he finished product is not expec	ted to have chronic health effects.		

Teratogenicity

Name of Toxicologically Synergistic Products

		12. Ecological Information	
Ecotoxicity	See below		
Ecotoxicological data			
Components		Species	Test Results
Didecyl Dimethyl Ammonium Chl	oride (CAS 7173-	51-5)	
Aquatic			
Fish	LC50	White sturgeon (Acipenser transmontanus)	0.001 - 0.01 mg/l, 96 hours
Diethylene glycol monobutyl ethe	r (CAS 112-34-5)		
Crustacea	EC50	Daphnia	2850 mg/L, 48 Hours
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	1300 mg/l, 96 hours
Ethanol, 2,2",2""-nitrilotris- (CAS	102-71-6)		
Algae	IC50	Algae	216 mg/L, 72 Hours
Aquatic		<u> </u>	.
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
		· · · ·	
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 - 13010 mg/l, 96 hours
Sodium citrate (CAS 6132-04-3)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	655 - 825.9 mg/l, 48 hours
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 Diethylene glycol monobutyl Ethanol, 2,2'',2''''-nitrilotris-	ether	0.56 -1	
Chemical fate information	Not available.		
		13. Disposal C	considerations
Disposal instructions	Dispose in acc	cordance with all applicable regulations.	
	PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be of by use according to label instructions, contact your State Pesticide or Environmental Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for		al law. If these wastes cannot be dispose ate Pesticide or Environmental Control
	CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.		
	Pesticide Disp drip. Repeat p	follows: Fill container 1/4 full with water ar osal instructions for rinsate disposal. Drain rocedure 2 more times. Then offer for recy dispose in a sanitary landfill.	for 10 seconds after the flow begins to
Waste from residues / unused products	Not available		
	Not available		

	14. Halispo		
U.S. Department of Transporta	ation (DOT)		
Not regulated as dangerous			
Transportation of Dangerous	Goods (TDG - Canada)		
Not regulated as dangerous	s goods.		
IATA/ICAO (Air)			
Not regulated as dangerous	s goods.		
IMDG (Marine Transport)			
Not regulated as dangerous	s goods.		
	15. Regulato	ry Information	
Occupational Safety and Healt	•		
29 CFR 1910.1200	Yes		
hazardous chemical	105		
US federal regulations	This product is a "Hazardous (Standard, 29 CFR 1910.1200.	Chemical" as defined by the OSHA Hazard Communication	
	Product Registration: Registe	red with EPA, EPA Reg. No. 777-82-675	
US EPCRA (SARA Title III)) Section 313 - Toxic Chemical: [
•	butyl ether (CAS 112-34-5)	1.0 % N230	
) Section 313 - Toxic Chemical: L	isted substance	
, ,	obutyl ether (CAS 112-34-5) rt Notification (40 CFR 707, Subp	Listed. N230 bt. D)	
Not regulated. CERCLA Hazardous Subs	stance List (40 CFR 302.4)		
	butyl ether (CAS 112-34-5) tile Organic Compounds: Listed	Listed. substance	
	obutyl ether (CAS 112-34-5) on 112(r) Accidental Release Pre	Listed. evention (40 CFR 68.130)	
Not regulated. Clean Air Act (CAA) Section	on 112 Hazardous Air Pollutants	(HAPs) List	
Diethylene glycol monc	bbutyl ether (CAS 112-34-5)	Listed.	
CERCLA (Superfund) reportat	ble quantity		
None			
Superfund Amendments and I	Reauthorization Act of 1986 (SAI	RA)	
Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No		
State regulations	This product is not subject to v	warning labeling under the California Proposition 65 regulation.	
US - California Propositio	n 65 - Carcinogens & Reproduct	ive Toxicity (CRT): Listed substance	
Ethanol, 2,2"-iminobis-	(CAS 111-42-2)	Listed.	
US - Illinois Chemical Safe	ety Act: Listed substance		
	obutyl ether (CAS 112-34-5) rting List: Reportable quantity (t	Listed. otal mass into atmosphere)	
Diethylene glycol mono US - Louisiana Spill Repo	obutyl ether (CAS 112-34-5) rting: Listed substance	100 LBS	
Diethylene glycol mono US - Minnesota Haz Subs:	bbutyl ether (CAS 112-34-5) : Listed substance	Listed.	
Ethanol, 2,2",2""-nitrilo	tris- (CAS 102-71-6) Ibstances: Listed substance	Listed.	
US - New Jersey RTK - Su	Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.		
Diethylene glycol mono	butyl ether (CAS 112-34-5)		
Diethylene glycol mono Ethanol, 2,2'',2''''-nitrilo	obutyl ether (CAS 112-34-5) tris- (CAS 102-71-6)	Listed. Listed.	
Diethylene glycol mono Ethanol, 2,2'',2'''-nitrilot US - Texas Effects Screen	butyl ether (CAS 112-34-5)		

Ethanol, 2,2",2""-nitrilotris- (CAS 102-71-6) Sodium citrate (CAS 6132-04-3) US. Massachusetts RTK - Substance List Ethanol, 2,2",2""-nitrilotris- (CAS 102-71-6) US. Pennsylvania RTK - Hazardous Substances Diethylene glycol monobutyl ether (CAS 112-34-5) Ethanol, 2,2",2""-nitrilotris- (CAS 102-71-6) US. Rhode Island RTK Diethylene glycol monobutyl ether (CAS 112-34-5)		Listed. Listed. Listed. Listed. Listed.			
			Country(s) or region	Inventory name	On inventory (yes/no)*
			United States & Puerto Rico *A "Yes" indicates that all compon	Toxic Substances Control Ac ents of this product comply with th	e inventory requirements administered by the governing country(s)
	16. Other	r 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	Professional LYSOL® Brand III Disinfectant Deodorizing Cleaner – Lemon Scent – 374055v2.0				
Issue date	12-August-2014				
Effective date	01-August-2014				
Drawarad by	Reckitt Benckiser Regulatory Department Phone: 800-333-3899				
Prepared by	Reckitt Benckiser Regulatory	Department Phone: 800-333-3899			
Other information	•••	Department Phone: 800-333-3899 se contact the supplier/manufacturer listed on the first page of the			