

#### MATERIAL SAFETY DATA SHEET

### 1. Product and Company Identification

Product Name LYSOL® IC™ - Quaternary Disinfectant Cleaner Concentrate - Use dilution 1:256

(1/2oz./gal.)

**UPC CODES** Refer to Section 16

CAS # Mixture
Product use Disinfectant
Distributed by Reckitt Benckiser

Morris Corporate Center IV 399 Interpace Parkway P.O. Box 225

Parsippany, NJ 07054-0225

In Case of Emergency: 1-800-228-4722 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





### 2. Hazards Identification

#### **Emergency overview**

This product is regulated by the US EPA as a disinfectant.

PRECAUTIONARY STATEMENTS: Hazards to humans and domestic animals.

#### **DANGER -- CORROSIVE**

Causes irreversible eye damage and skin burns. HARMFUL IF SWALLOWED. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), protective clothing and protective gloves (rubber or chemical resistant). HARMFUL IF INHALED. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

KEEP OUT OF REACH OF CHILDREN.

#### Potential short term health effects

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

Eyes Corrosive to eyes. Causes irreversible eye damage.
Skin Corrosive to skin. Causes burns. Avoid skin contact.

Not expected to be a skin sensitizer.

**Inhalation** Use only in a well ventilated area.

**Ingestion** Harmful if swallowed.

Target organs Eyes. Skin. Respiratory system.

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

Signs and symptoms Symptoms may include headache, dizziness, tiredness, nausea and vomiting.

	3. Composition	/ Information	on Ingredients
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Ingredient(s)	CAS#	Percent
Didecyl Dimethyl Ammonium Chloride	Not Applicable	7 - 13
Ethylenediamine tetraacetic acid	60-00-4	2.5 - 10
N-Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride	Not Applicable	2.5 - 10
Octyl dimethylamine oxide	2605-78-9	2.5 - 10
Ethanol	64-17-5	1 - 2.5
Sodium hydroxide	1310-73-2	1 - 2.5

### 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.

**Skin contact** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty

of water for 15-20 minutes.

**Inhalation** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give

artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or

doctor for further treatment advice.

**Ingestion** Call a poison control center or doctor immediately for treatment advice. Have person sip

a glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious

person.

**Notes to physician** Probable mucosal damage may contraindicate the use of gastric lavage.

Appropriate treatment to help protect the affected person against circulatory shock,

respiratory depression, and convulsion may be needed.

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 Combustible by OSHA 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

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. Ammonia.

Hydrogen chloride.

**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.

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 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 **DANGER** 

Corrosive material.

Causes irreversible eye and skin burns.

HARMFUL IF SWALLOWED. HARMFUL IF INHALED.

Do not get in eyes, on skin or on clothing.

Do not get this material in your eyes, on your skin, or on your clothing.

Use according to package label instructions.

Store in original container out of reach of small children. Keep securely closed in a cool, Storage

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

Exposure limits			
Ingredient(s)		Exposure Limits	
Didecyl Dimethyl Ammonium Chloride		ACGIH-TLV	
		Not established	
		OSHA-PEL	
		Not established	
Ethanol		ACGIH-TLV	
		TWA: 1000 ppm	
		STEL: 1000 ppm	
		OSHA-PEL	
		TWA: 1000 ppm	
Ethylenediamine tetraacetic acid		ACGIH-TLV	
		Not established	
		OSHA-PEL	
		Not established	
N-Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride		ACGIH-TLV	
		Not established	
		OSHA-PEL	
		Not established	
Octyl dimethylamine oxide		ACGIH-TLV	
		Not established	
		OSHA-PEL	
		Not established	
Sodium hydroxide		ACGIH-TLV	
		Ceiling: 2 mg/m3	
		OSHA-PEL	
		TWA: 2 mg/m3	
Engineering controls	General ventilation	General ventilation normally adequate.	
Personal protective equipment			
Eye / face protection	Avoid contact with eyes. Wear chemical goggles.		

Hand protection Protective gloves.

Avoid contact with the skin. Wash hands after use.

Emergency responders should wear impermeable gloves.

Emergency responders should wear full eye and face protection.

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.

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.

Use good industrial hygiene practices in handling this material. When using do not eat or General hygiene considerations

drink. Washing with soap and water after use is recommended as good hygienic practice

to prevent possible eye irritation from hand contact.

## 9. Physical and Chemical Properties

Clear. **Appearance** Color Amber

**Form** aqueous solution Mild Characteristic Odor Odor threshold Not available Physical state Liquid

7.2 - 8.2 @ 25°C pН Freezing point Not available Not available **Boiling point** Not available Pour point **Evaporation rate** Not available

159.99 °F (71.111 °C) Tagliabue Flash point

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

by volume

Flammability limits in air, upper, %

by volume

Not available

Not available Vapor pressure Not available Vapor density 0.99 - 1.01 @ 25°C Specific gravity Not available Octanol/water coefficient Solubility (H2O) Complete

# 10. Stability and Reactivity

Chemical stability Stable under recommended storage conditions.

Conditions to avoid DO NOT MIX WITH BLEACH or use in conjunction with other household products.

Excessive heat.

Incompatible materials

May include and are not limited to: Oxides of carbon, Oxides of nitrogen, Ammonia. Hazardous decomposition products

Hydrogen chloride.

Hazardous polymerization does not occur. Possibility of hazardous reactions

## 11. Toxicological Information

Component analysis - LC50	
Ingredient(s)	LC50
Didecyl Dimethyl Ammonium Chloride	Not available
Ethanol	31623 ppm rat
Ethylenediamine tetraacetic acid	Not available
N-Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride	Not available
Octyl dimethylamine oxide	Not available
Sodium hydroxide	Not available

Component analysis - Oral LD50

Ingredient(s)

3	
Didecyl Dimethyl Ammonium Chloride	Not available
Ethanol	3450 mg/kg mouse; 7060 mg/kg rat
Ethylenediamine tetraacetic acid	> 2000 mg/kg rat
N-Alkyl (C14 50%, C12 40%, C16 10%) dimethyl benzyl ammonium chloride	Not available
Octyl dimethylamine oxide	Not available
Sodium hydroxide	Not available

**LD50** 

Effects of acute exposure

Inhalation

Eye Corrosive to eyes. Causes irreversible eye damage.

Skin Corrosive to skin. Causes burns. Avoid skin contact.

Not expected to be a skin sensitizer.
Use only in a well ventilated area.

**Ingestion** Harmful if swallowed.

SensitizationThe finished product is not expected to have chronic health effects.Chronic effectsThe finished product is not expected to have chronic health effects.CarcinogenicityThe finished product is not expected to have chronic health effects.

**ACGIH - Threshold Limit Values - Carcinogens** 

Ethanol 64-17-5 A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

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.

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 Algae Data** 

Ethylenediamine tetraacetic acid 60-00-4 72 Hr EC50 Desmodesmus subspicatus: 1.01 mg/L

**Ecotoxicity - Freshwater Fish Species Data** 

Ethanol 64-17-5 96 Hr LC50 Oncorhynchus mykiss: 12.0-16.0 ml/L [static]; 96 Hr LC50 Pimephales

promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400-15100 mg/L

[flow-through]

Ethylenediamine tetraacetic acid 60-00-4 96 Hr LC50 Lepomis macrochirus: 34-62 mg/L [static]; 96 Hr LC50 Pimephales

promelas: 44.2-76.5 mg/L [static]

Sodium hydroxide 1310-73-2 96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static]

Ecotoxicity - Water Flea Data

Ethanol 64-17-5 48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]

Ethylenediamine tetraacetic acid 60-00-4 48 Hr EC50 Daphnia magna: 113 mg/L [Static]

Environmental effects

Aquatic toxicity

Persistence / degradability

Bioaccumulation / accumulation

Partition coefficient

Mobility in environmental media

Chemical fate information

Not available

Not available

Not available

# 13. Disposal Considerations

Waste codes Not available

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

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.

Waste from residues / unused

products

Contaminated packaging

Not available

Not available

# 14. Transport Information

### **U.S. Department of Transportation (DOT)**

UN 1903, Disinfectant, Liquid, Corrosive, N.O.S.
(Didecyl Dimethyl Ammonium Chloride, Alkyl Dimethyl Benzyl Ammonium Chloride), Class 8, PG III, Limited Quantity Re-Classed as Consumer Commodity ORM-D.

#### Transportation of Dangerous Goods (TDG - Canada)

UN 1903, Disinfectant, Liquid, Corrosive, N.O.S.
(Didecyl Dimethyl Ammonium Chloride, Alkyl Dimethyl
Benzyl Ammonium Chloride), Class 8, PG III, Limited
Quantity Re-Classed as Consumer Commodity / Limited
Quantity

### **IMDG (Marine Transport)**

UN 1903, Disinfectant, Liquid, Corrosive, N.O.S. (Didecyl Dimethyl Ammonium Chloride, Alkyl Dimethyl Benzyl Ammonium Chloride), Class 8, PG III, Limited Quantity

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UN 1903, Disinfectant, Liquid, Corrosive, N.O.S. (Didecyl Dimethyl Ammonium Chloride, Alkyl Dimethyl Benzyl Ammonium Chloride), Class 8, PG III

# 15. Regulatory Information

**US Federal regulations** 

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

CERCLA/SARA Hazardous Substances - Not applicable.

Product Registration: Registered with EPA, EPA Reg. No. 47371-129-675

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Ethylenediamine tetraacetic acid 60-00-4 5000 Lb final RQ; 2270 kg final RQ Sodium hydroxide 1310-73-2 1000 Lb final RQ; 454 kg final RQ

U.S. - CWA (Clean Water Act) - Hazardous Substances

Ethylenediamine tetraacetic acid 60-00-4 Present
Sodium hydroxide 1310-73-2 Present

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous Yes

chemical

CERCLA (Superfund) reportable quantity

Ethylenediamine tetraacetic acid: 5000.0000

Sodium hydroxide: 1000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

Section 302 extremely

hazardous substance

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available
Clean Water Act (CWA) Not available

#### U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Ethylenediamine tetraacetic acid	60-00-4	Present
Sodium hydroxide	1310-73-2	Present

#### U.S. - Louisiana - Reportable Quantity List for Pollutants

Ethylenediamine tetraacetic acid 60-00-4 5000 Lb final RQ; 2270 kg final RQ Sodium hydroxide 1310-73-2 1000 Lb final RQ; 454 kg final RQ

U.S. - Massachusetts - Right To Know List

Ethanol64-17-5TeratogenEthylenediamine tetraacetic acid60-00-4PresentSodium hydroxide1310-73-2Present

U.S. - Minnesota - Hazardous Substance List

Ethanol 64-17-5 Present Sodium hydroxide 1310-73-2 Present U.S. - New Jersey - Right to Know Hazardous Substance List sn 0844 **Fthanol** 64-17-5 60-00-4 Ethylenediamine tetraacetic acid sn 0876 Sodium hydroxide 1310-73-2 sn 1706

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

Ethylenediamine tetraacetic acid 60-00-4 5000 Lb RQ (air); 1 lb RQ (land/water) Sodium hydroxide 1310-73-2 1000 Lb RQ (air); 100 lb RQ (land/water)

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

Ethanol 64-17-5 Present

Ethylenediamine tetraacetic acid 60-00-4 Environmental hazard Sodium hydroxide 1310-73-2 Environmental hazard

U.S. - Rhode Island - Hazardous Substance List

Ethanol 64-17-5 Toxic; Flammable Sodium hydroxide 1310-73-2 Toxic; Flammable

Inventory status

Country(s) or region Inventory name
United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

On inventory (yes/no)\*

Yes

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.

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 36241-74983-5 - LYSOL® IC™ Quaternary Disinfectant Cleaner Concentrate - Use

dilution 1:256 (1/2 oz./gal.) - 1 gal. - 366519

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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.