



## SAFETY DATA SHEET

### LEMON FRESH DISINFECTANT CLEANER

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LEMON FRESH DISINFECTANT CLEANER

Other means of identification : Not applicable

Recommended use : Disinfectant

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 1.56 %

Company : Ecolab Inc.  
1 Ecolab Place  
St. Paul, Minnesota USA 55102  
1-866-999-7484

Emergency telephone : 1-866-897-8061 (US/Canada), 952-852-4656 (outside US)

Issuing date : 03.03.2021

#### SECTION 2. HAZARDS IDENTIFICATION

##### Product AS SOLD

Physical and chemical hazards : Not flammable or combustible.

##### Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : Harmful if swallowed. Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

##### Product AT USE DILUTION

Physical and chemical hazards : Not flammable or combustible.

##### Potential Health Effects

Eyes : Health injuries are not known or expected under normal use.

Skin : Health injuries are not known or expected under normal use.

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

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

##### Product AS SOLD

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Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
Alcohols, C9-11, ethoxylated	68439-46-3	1 - 5
ethylenediamine tetraacetate	64-02-8	1 - 5
Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride	68424-85-1	1.52
sodium metasilicate	6834-92-0	1 - 5
Octyl decyl dimethyl ammonium chloride	32426-11-2	1.14
Dioctyl dimethyl ammonium chloride	5538-94-3	0.456
Didecyl Dimethyl Ammonium Chloride	7173-51-5	0.684

#### Product AT USE DILUTION

Chemical name	CAS-No.	Concentration (%)
Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride	68424-85-1	0.0237
Octyl decyl dimethyl ammonium chloride	32426-11-2	0.0178
Dioctyl dimethyl ammonium chloride	5538-94-3	0.0071
Didecyl Dimethyl Ammonium Chloride	7173-51-5	0.0107

### SECTION 4. FIRST AID MEASURES

#### Product AS SOLD

In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
Protection of first-aiders	: If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Notes to physician	: Treat symptomatically.
Most important symptoms and effects, both acute and delayed	: See Section 11 for more detailed information on health effects and symptoms.

#### Product AT USE DILUTION

In case of eye contact	: Rinse with plenty of water.
In case of skin contact	: Rinse with plenty of water.
If swallowed	: Rinse mouth. Get medical attention if symptoms occur.
If inhaled	: Get medical attention if symptoms occur.

### SECTION 5. FIRE-FIGHTING MEASURES

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#### Product AS SOLD

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Sulfur oxides  
Oxides of phosphorus
- Special protective equipment for fire-fighters : Use personal protective equipment.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Product AS SOLD

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

#### Product AT USE DILUTION

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

### SECTION 7. HANDLING AND STORAGE

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#### Product AS SOLD

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.

Conditions for safe storage : Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

#### Product AT USE DILUTION

Advice on safe handling : Wash hands after handling. For personal protection see section 8.

Conditions for safe storage : Do not store near acids. Keep out of reach of children. Store in suitable labeled containers.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Product AS SOLD

##### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

##### Personal protective equipment

Eye protection : Safety goggles  
Face-shield

Hand protection : Wear the following personal protective equipment:  
Standard glove type.  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

#### Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

##### Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

Skin protection : No special protective equipment required.

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Respiratory protection : No personal respiratory protective equipment normally required.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: clear, light yellow	light yellow
Odor	: citrus	citrus
pH	: 12.4 - 13.4, 100 %	12.4
Flash point	: Not applicable, Does not sustain combustion.	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: No data available	
Evaporation rate	: No data available	
Flammability (solid, gas)	: No data available	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapor pressure	: No data available	
Relative vapor density	: No data available	
Relative density	: 1.015 - 1.035	
Water solubility	: soluble	
Solubility in other solvents	: No data available	
Partition coefficient: n-octanol/water	: No data available	
Autoignition temperature	: No data available	
Thermal decomposition	: No data available	
Viscosity, kinematic	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: The substance or mixture is not classified as oxidizing.	
Molecular weight	: No data available	
VOC	: No data available	

#### SECTION 10. STABILITY AND REACTIVITY

##### Product AS SOLD

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: None known.
Incompatible materials	: Acids

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Hazardous decomposition products : Decomposition products may include the following materials:  
Carbon oxides  
Nitrogen oxides (NOx)  
Sulfur oxides  
Oxides of phosphorus

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

##### Potential Health Effects

###### Product AS SOLD

Eyes : Causes serious eye damage.  
Skin : Causes severe skin burns.  
Ingestion : Harmful if swallowed. Causes digestive tract burns.  
Inhalation : May cause nose, throat, and lung irritation.  
Chronic Exposure : Health injuries are not known or expected under normal use.

###### Product AT USE DILUTION

Eyes : Health injuries are not known or expected under normal use.  
Skin : Health injuries are not known or expected under normal use.  
Ingestion : Health injuries are not known or expected under normal use.  
Inhalation : Health injuries are not known or expected under normal use.  
Chronic Exposure : Health injuries are not known or expected under normal use.

##### Experience with human exposure

###### Product AS SOLD

Eye contact : Redness, Pain, Corrosion  
Skin contact : Redness, Pain, Corrosion  
Ingestion : Corrosion, Abdominal pain  
Inhalation : Respiratory irritation, Cough

###### Product AT USE DILUTION

Eye contact : No symptoms known or expected.  
Skin contact : No symptoms known or expected.  
Ingestion : No symptoms known or expected.  
Inhalation : No symptoms known or expected.

##### Toxicity

###### Product AS SOLD Product

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Acute oral toxicity : No data available  
Acute inhalation toxicity : No data available  
Acute dermal toxicity : No data available  
Skin corrosion/irritation : No data available  
Serious eye damage/eye irritation : No data available  
Respiratory or skin sensitization : No data available  
Carcinogenicity : No data available  
Reproductive effects : No data available  
Germ cell mutagenicity : No data available  
Teratogenicity : No data available  
STOT-single exposure : No data available  
STOT-repeated exposure : No data available  
Aspiration toxicity : No data available

#### Ingredients

Acute oral toxicity : Alcohols, C9-11, ethoxylated  
LD50 Rat: 1,400 mg/kg  
  
ethylenediamine tetraacetate  
LD50 Rat: 1,700 mg/kg  
  
Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride  
LD50 Rat: 344 mg/kg  
  
sodium metasilicate  
LD50 Rat: 500 mg/kg  
  
Octyl decyl dimethyl ammonium chloride  
LD50 Rat: 238 mg/kg  
  
Dioctyl dimethyl ammonium chloride  
LD50 Rat: 238 mg/kg  
  
Didecyl Dimethyl Ammonium Chloride  
LD50 Rat: 1,150 mg/kg

#### Ingredients

Acute inhalation toxicity : Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride  
4 h LC50 Rat: > 0.054 mg/l  
  
Octyl decyl dimethyl ammonium chloride  
4 h LC50 Rat: 0.07 mg/l  
  
Dioctyl dimethyl ammonium chloride  
4 h LC50 Rat: 0.07 mg/l

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Didecyl Dimethyl Ammonium Chloride  
4 h LC50 Rat: 0.07 mg/l

#### Ingredients

Acute dermal toxicity : Alcohols, C9-11, ethoxylated  
LD50 Rat: > 5,000 mg/kg

Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride  
LD50 Rabbit: 3,340 mg/kg

Octyl decyl dimethyl ammonium chloride  
LD50 Rabbit: 2,930 mg/kg

Dioctyl dimethyl ammonium chloride  
LD50 Rabbit: 2,930 mg/kg

Didecyl Dimethyl Ammonium Chloride  
LD50 Rabbit: 2,930 mg/kg

### SECTION 12. ECOLOGICAL INFORMATION

#### Product AS SOLD

##### Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

#### Product

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

#### Ingredients

Toxicity to fish : Alcohols, C9-11, ethoxylated  
96 h LC50 Fish: 8.5 mg/l

ethylenediamine tetraacetate  
96 h LC50 Fish: 121 mg/l

sodium metasilicate  
96 h LC50 Fish: 210 mg/l

Octyl decyl dimethyl ammonium chloride  
96 h LC50 Fish: 1 mg/l

Didecyl Dimethyl Ammonium Chloride  
96 h LC50 Fish: 1 mg/l

#### Ingredients

Toxicity to daphnia and other aquatic invertebrates : Alcohols, C9-11, ethoxylated  
48 h EC50 Daphnia magna (Water flea): 5.3 mg/l

Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride  
48 h EC50 Daphnia magna (Water flea): 0.016 mg/l

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Dioctyl dimethyl ammonium chloride  
48 h EC50 Daphnia: 0.1 mg/l

#### Persistence and degradability

##### Product AS SOLD

Not applicable - Biocide

##### Product AT USE DILUTION

Not applicable - Biocide

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Product AS SOLD

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

#### Product AT USE DILUTION

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

#### Sea transport (IMDG/IMO)

Not dangerous goods

### SECTION 15. REGULATORY INFORMATION

For Regulatory information please contact your Ecolab sales representative.

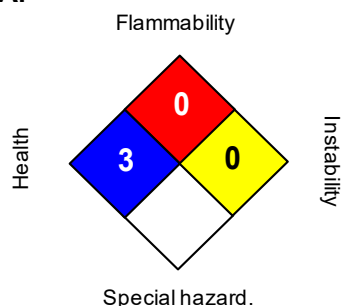
### SECTION 16. OTHER INFORMATION

#### Product AS SOLD

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### NFPA:



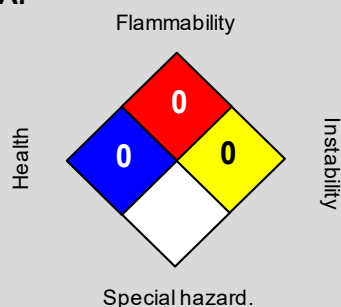
### HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

### Product AT USE DILUTION

#### NFPA:



#### HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Issuing date : 03.08.2016  
Version : 1.0  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the MSDS.

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