

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : QUATERNARY DISINFECTANT CLEANER

Other means of identification : not applicable

Recommended use : Disinfectant

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.39 % - 1.54 %

Company : Ecolab Inc.
370 N. Wabasha Street
St. Paul, Minnesota USA 55102
1-800-352-5326

Emergency telephone : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 07/07/2014

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification****Product AS SOLD**

Acute toxicity (Oral) : Category 4
Acute toxicity (Dermal) : Category 4
Skin corrosion : Category 1A
Serious eye damage : Category 1

Product AT USE DILUTION

Acute toxicity (Dermal) : Category 4
Eye irritation : Category 2B

GHS Label element**Product AS SOLD**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**

Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF

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IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Product AT USE DILUTION

Hazard pictograms :



Signal Word :

Caution

Hazard Statements :

Harmful in contact with skin.
Causes eye irritation.

Precautionary Statements :

Prevention:

Wash skin thoroughly after handling.

Response:

IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor/ physician if you feel unwell. If eye irritation persists: Get medical advice/ attention. Wash contaminated clothing before reuse.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards :

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture :

Mixture

Chemical Name

Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride

CAS-No.

68424-85-1

Concentration (%)

8.68

Octyl decyl dimethyl ammonium chloride

32426-11-2

6.51

Didecyl Dimethyl Ammonium Chloride

7173-51-5

3.906

Diocetyl dimethyl ammonium chloride

5538-94-3

2.604

ethanol

64-17-5

4.34

alcohol ethoxylate

68439-46-3

5 - 10

ethylenediamine tetraacetate

64-02-8

1 - 5

sodium metasilicate

6834-92-0

1 - 5

Product AT USE DILUTION

Chemical Name

Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride

CAS-No.

68424-85-1

Concentration (%)

0.134

Octyl decyl dimethyl ammonium chloride

32426-11-2

0.1

Didecyl Dimethyl Ammonium Chloride

7173-51-5

0.06

Diocetyl dimethyl ammonium chloride

5538-94-3

0.04

alcohol ethoxylate

68439-46-3

0 - 0.1

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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.

Product AT USE DILUTION

In case of eye contact : Rinse with plenty of water.

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 if irritation develops and persists.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

See toxicological information (Section 11)

SECTION 5. FIRE-FIGHTING MEASURES

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 : Carbon oxides

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.

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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 in sections 7 and 8.

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

: Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

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.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD

Advice on safe handling

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

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

: Avoid contact with skin and eyes. Wash hands thoroughly after handling. Use only with adequate ventilation.

Conditions for safe storage

: Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Ingredients with workplace control parameters

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| Ingredients | CAS-No. | Form of exposure | Permissible concentration | Basis |
|-------------|---------|------------------|--------------------------------------|-----------|
| ethanol | 64-17-5 | TWA | 1,000 ppm | ACGIH |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | NIOSH REL |
| | | TWA | 1,000 ppm 1,900 mg/m ³ | OSHA Z1 |

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

Personal protective equipment

| | |
|------------------------|--|
| Eye protection | : Safety goggles Safety glasses 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 : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

| | |
|------------------------|---|
| Eye protection | : No special protective equipment required. |
| Hand protection | : No special protective equipment required. |
| Skin protection | : No special protective equipment required. |
| 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, purple | purple |
| Odor | : odorless | Disinfectants |
| pH | : 13.0, 100 % | 9.3 - 10.3 |

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| | |
|---|---------------------|
| Flash point | : 58 °C closed cup |
| 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 | : 0.99 - 1.01 |
| Water solubility | : no data available |
| 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 | : no data available |
| 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 |
| Hazardous decomposition products | : Carbon oxides |

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.

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| | |
|------------------|---|
| Skin | : Causes severe skin burns. |
| Ingestion | : 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 | : Causes eye irritation. |
| Skin | : Harmful in contact with skin. |
| 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 | : Redness, Irritation |
| Skin contact | : No information available. |
| Ingestion | : No symptoms known or expected. |
| Inhalation | : No symptoms known or expected. |

Toxicity

Product AS SOLD

| | |
|-----------------------------------|---|
| Acute oral toxicity | : Acute toxicity estimate : 1,316 mg/kg |
| Acute inhalation toxicity | : no data available |
| Acute dermal toxicity | : Acute toxicity estimate : > 1,000 mg/kg |
| Skin corrosion/irritation | : no data available |
| Respiratory or skin sensitization | : no data available |
| Carcinogenicity | |
| IARC | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| OSHA | No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

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NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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 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

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

Diocetyl dimethyl ammonium chloride
4 h LC50 rat: 0.07 mg/l

ethanol
4 h LC50 rat: 117 mg/l

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

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

ethanol
96 h LC50 Fish: 11,000 mg/l

alcohol ethoxylate
96 h LC50 Fish: 8.5 mg/l

ethylenediamine tetraacetate
96 h LC50 Fish: 121 mg/l

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sodium metasilicate
96 h LC50 Fish: 210 mg/l

Ingredients

Toxicity to daphnia and other aquatic invertebrates : Alkyl (C14 50%; C12 40%; C16 10%) dimethyl benzyl ammonium chloride
48 h EC50: 0.0059 mg/l

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

Persistence and degradability

no data available

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.

RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste

: D002 (Corrosive)

Product AT USE DILUTION

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.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

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The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

UN number : 1903
Description of the goods : Disinfectants, liquid, corrosive n.o.s.
(Quaternary ammonium compound)
Class : 8
Packing group : III
Environmentally hazardous : no

Sea transport (IMDG/IMO)

UN number : 1903
Description of the goods : DISINFECTANT, LIQUID, CORROSIVE, N.O.S.
(Quaternary ammonium compound)
Class : 8
Packing group : III
Marine pollutant : no

Product AT USE DILUTION

Not intended for transport.

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPA Registration number : 6836-78-1677

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

1907/2006 (EU) :

not determined

Switzerland. New notified substances and declared preparations :

not determined

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United States TSCA Inventory :

On TSCA Inventory

Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL.

Australia Inventory of Chemical Substances (AICS) :

not determined

New Zealand. Inventory of Chemical Substances :

not determined

Japan. ENCS - Existing and New Chemical Substances Inventory :

not determined

Japan. ISHL - Inventory of Chemical Substances (METI) :

not determined

Korea. Korean Existing Chemicals Inventory (KECI) :

not determined

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

not determined

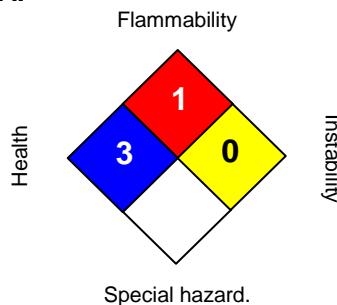
China. Inventory of Existing Chemical Substances in China (IECSC) :

not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:



HMIS III:

| | |
|-----------------|---|
| HEALTH | 3 |
| FLAMMABILITY | 1 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 =Slight,

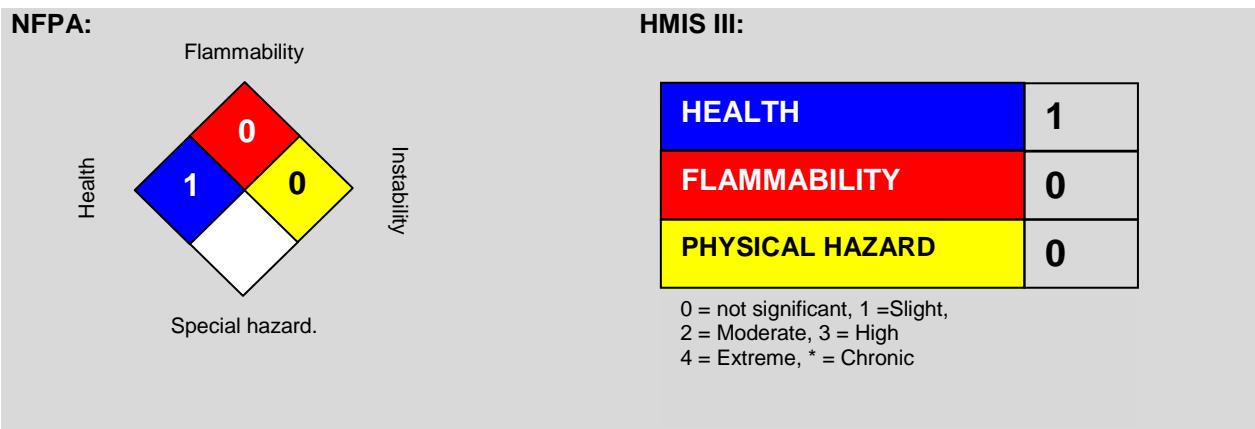
2 = Moderate, 3 = High

4 = Extreme, * = Chronic

Product AT USE DILUTION

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Issuing date : 07/07/2014

Version : 1.3

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 SDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.