Material Safety Data Sheet
A-456 II DISINFECTANT CLEANER

Section 1. Chemical product and company identification

| Trade name | A-456 II DISINFECTANT CLEANER |
| Product use | Cleaner and disinfectant |
| Supplier | Ecolab Inc.  
370 N. Wabasha St.  
St. Paul, MN 55102  
1-800-352-5326 |
| Code | 903964-01 |
| Date of issue | 21-April-2009 |
| EPA Registration No. | 6836-78-1677 |

EMERGENCY HEALTH INFORMATION: 1-800-328-0026  
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Hazards identification

Physical state: Liquid. [Liquid.]
Emergency overview: DANGER!

- CAUSES DIGESTIVE TRACT, EYE AND SKIN BURNS.
- HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
- CAUSES RESPIRATORY TRACT IRRITATION.
- COMBUSTIBLE LIQUID AND VAPOR.

Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing vapors, spray or mists. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Potential acute health effects

| Eyes | Corrosive to eyes. |
| Skin | Corrosive to the skin. |
| Inhalation | Severely irritating to the respiratory system. |
| Ingestion | Causes burns to mouth, throat and stomach. |

See toxicological information (section 11)

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>% by weight</th>
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<tbody>
<tr>
<td>DICAPRYL/DICAPRYLYL DIMONIUM CHLORIDE</td>
<td>68424-95-3</td>
<td>5 - 20</td>
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<tr>
<td>quaternary ammonium compounds, benzyl-c12-c16-alkyldimethyl, chlorides</td>
<td>68424-85-1</td>
<td>5 - 20</td>
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<tr>
<td>alcohols, c9-11, ethoxylated</td>
<td>68439-46-3</td>
<td>5 - 20</td>
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<tr>
<td>ALCOHOL</td>
<td>64-17-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>TETRASODIUM EDTA</td>
<td>64-02-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>SODIUM METASILICATE</td>
<td>6834-92-0</td>
<td>1 - 5</td>
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</tbody>
</table>

Section 4. First aid measures

Eye contact: In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation: If inhaled, remove to fresh air. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention immediately.
Section 5. Fire-fighting measures

Ingestion: If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Flash point**: 58.3333 °C (Closed cup)

**Hazardous thermal decomposition products**: Decomposition products may include the following materials:
- Carbon dioxide
- Carbon monoxide
- Nitrogen oxides
- Metal oxide/oxides

**Fire-fighting media and instructions**: Use dry chemical, CO₂, water spray (fog) or foam.

- Use water spray to keep fire-exposed containers cool. Dike area of fire to prevent runoff.
- Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**Personal precautions**: Immediately contact emergency personnel. Stop leak if without risk. Use suitable protective equipment. Keep unnecessary personnel away. Do not touch or walk through spilled material.

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods for cleaning up**: If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

**Handling**: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or spray. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

**Storage**: Keep out of reach of children. Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above the following temperature: 50°C

Section 8. Exposure controls/personal protection

**Engineering measures**: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

**Personal protection**: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.

- **Eyes**: Use chemical-resistant, impervious gloves.
- **Hands**: Wear suitable protective clothing.
Section 9. Physical and chemical properties

Physical state: Liquid. [Liquid.]
Color: Purple. [Dark]
Odor: disinfectant
pH: 13 [Conc. (% w/w): 100%]
Relative density: 0.99 to 1.01

Section 10. Stability and reactivity

Stability: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Reactivity: Slightly reactive or incompatible with the following materials: acids.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Potential acute health effects
- Eyes: Corrosive to eyes.
- Skin: Corrosive to the skin.
- Inhalation: Severely irritating to the respiratory system.
- Ingestion: Causes burns to mouth, throat and stomach.

Potential chronic health effects
- Target organs: Contains material which may cause damage to the following organs: upper respiratory tract, central nervous system (CNS).

Section 12. Ecological information

Ecotoxicity data: Not available.

Section 13. Disposal considerations

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste classification: Unused product is D002 (Corrosive)

Consult your local or regional authorities.
Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

UN Classification

<table>
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<th>UN number</th>
<th>UN1993</th>
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<tr>
<td>Proper shipping name</td>
<td>FLAMMABLE LIQUID, N.O.S. (ethanol)</td>
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<td>Class</td>
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<td>Packing group</td>
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See shipping documents for specific transportation information.

Section 15. Regulatory information

HCS Classification: Combustible liquid
Corrosive material
Target organ effects

U.S. Federal regulations

<table>
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<th>TSCA 8(b) inventory</th>
<th>All components are listed or exempted.</th>
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<tbody>
<tr>
<td>EPA Registration No.</td>
<td>6836-78-1677</td>
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</tbody>
</table>

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

California Prop. 65: No products were found.

Section 16. Other information

<table>
<thead>
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<th>Hazardous Material Information System (U.S.A.)</th>
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<tr>
<td>Health: 3</td>
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<tr>
<td>Flammability: 2</td>
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<td>Physical hazards: 0</td>
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Date of issue: 21-April-2009.
Responsible name: Regulatory Affairs
Date of previous issue: 12-December-2008.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.