

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : KOOL KLENE

Other means of identification : Not applicable

Recommended use : Cleaning product

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

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

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

Issuing date : 03/14/2016

**SECTION 2. HAZARDS IDENTIFICATION**
**GHS Classification**

Flammable liquids : Category 3  
Eye irritation : Category 2B

**GHS label elements**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : Flammable liquid and vapor.  
Causes eye irritation.

Precautionary Statements : **Prevention:**  
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash skin thoroughly after handling.

**Response:**  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**  
Store in a well-ventilated place. Keep cool.

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

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Other hazards : None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

| Chemical name  | CAS-No.    | Concentration (%) |
|--|------------|-------------------|
| glycerin   | 56-81-5    | 30 - 60           |
| propan-2-ol  | 67-63-0    | 5 - 10            |
| monoethanolamine   | 141-43-5   | 1 - 5             |
| poly(oxy-1,2-ethanediyl), .alpha.-undecyl-.omega.-hydroxy- | 34398-01-1 | 1 - 5             |

### SECTION 4. FIRST AID MEASURES

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.

Protection of first-aiders : No special precautions are necessary for first aid responders.

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.

### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

Specific hazards during fire fighting : Fire Hazard  
Keep away from heat and sources of ignition.  
Flash back possible over considerable distance.  
Beware of vapors accumulating to form explosive concentrations.  
Vapors can accumulate in low areas.

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

Special protective equipment for fire-fighters : Use personal protective equipment.

Specific extinguishing methods : Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion

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do not breathe fumes.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition. 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 : Eliminate all ignition sources if safe to do so. 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

- Advice on safe handling : Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Wash hands thoroughly after handling.
- Conditions for safe storage : Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Storage temperature : 0 °C to 35 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

| Ingredients      | CAS-No.  | Form of exposure          | Permissible concentration          | Basis     |
|------------------|----------|---------------------------|------------------------------------|-----------|
| glycerin         | 56-81-5  | TWA                       | 10 mg/m <sup>3</sup>               | ACGIH     |
|                  |          | TWA (respirable fraction) | 5 mg/m <sup>3</sup>                | OSHA Z1   |
| propan-2-ol      | 67-63-0  | TWA                       | 200 ppm                            | ACGIH     |
|                  |          | STEL                      | 400 ppm                            | ACGIH     |
|                  |          | TWA                       | 400 ppm<br>980 mg/m <sup>3</sup>   | NIOSH REL |
|                  |          | STEL                      | 500 ppm<br>1,225 mg/m <sup>3</sup> | NIOSH REL |
| monoethanolamine | 141-43-5 | TWA                       | 400 ppm<br>980 mg/m <sup>3</sup>   | OSHA Z1   |
|                  |          | TWA                       | 3 ppm                              | ACGIH     |
|                  |          | STEL                      | 6 ppm                              | ACGIH     |
|                  |          | TWA                       | 3 ppm<br>8 mg/m <sup>3</sup>       | NIOSH REL |
|                  |          | STEL                      | 6 ppm<br>15 mg/m <sup>3</sup>      | NIOSH REL |
|                  |          | TWA                       | 3 ppm                              | OSHA Z1   |

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6 mg/m<sup>3</sup>

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.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid  
Color : cloudy, light green  
Odor : alcohol-like  
pH : 10.6 - 11.8, 100 %  
Flash point : 41 °C closed cup, Sustains 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 : 1.065 - 1.085  
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 : No data available  
Molecular weight : No data available  
VOC : No data available

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## SECTION 10. STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Chemical stability                 | : Stable under normal conditions.  |
| Possibility of hazardous reactions | : No dangerous reaction known under conditions of normal use.  |
| Conditions to avoid                | : Heat, flames and sparks.   |
| Incompatible materials             | : Acids  |
| Hazardous decomposition products   | : Decomposition products may include the following materials:<br>Carbon oxides<br>Nitrogen oxides (NOx)<br>Sulfur oxides<br>Oxides of phosphorus |

## SECTION 11. TOXICOLOGICAL INFORMATION

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

### Potential Health Effects

|                  |   |
|------------------|---|
| Eyes             | : Causes eye irritation.                                      |
| 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

|              |                                  |
|--------------|----------------------------------|
| Eye contact  | : Redness, Irritation            |
| Skin contact | : No symptoms known or expected. |
| Ingestion    | : No symptoms known or expected. |
| Inhalation   | : No symptoms known or expected. |

### Toxicity

#### Product

|                           |   |
|---------------------------|---|
| Acute oral toxicity       | : Acute toxicity estimate : > 5,000 mg/kg |
| Acute inhalation toxicity | : 4 h Acute toxicity estimate : > 10 mg/l |
| Acute dermal toxicity     | : Acute toxicity estimate : > 5,000 mg/kg |
| Skin corrosion/irritation | : Mild skin irritation                    |

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|                                   |   |   |
|-----------------------------------|---|---|
| Serious eye damage/eye irritation | : | Mild eye irritation<br>Method: OECD Test Guideline 437<br>Test substance: Product |
| 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   |

## SECTION 12. ECOLOGICAL INFORMATION

### 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 | : | glycerin<br>96 h LC50 Fish: 855 mg/l   |
|                  |   | propan-2-ol<br>96 h LC50 Pimephales promelas (fathead minnow): 9,640 mg/l              |
|                  |   | poly(oxy-1,2-ethanediyl), .alpha.-undecyl-.omega.-hydroxy-<br>96 h LC50 Fish: 3.2 mg/l |

### Ingredients

|   |   |   |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | propan-2-ol<br>LC50 Daphnia magna (Water flea): > 10,000 mg/l |
|   |   | monoethanolamine<br>48 h EC50 Daphnia: 65 mg/l                |

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

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No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

- Disposal methods : 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.
- RCRA - Resource Conservation and Recovery Act Hazardous waste : D001 (Ignitable)

### SECTION 14. TRANSPORT INFORMATION

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)

Not dangerous goods

#### Sea transport (IMDG/IMO)

- UN number : 1993
- Description of the goods : FLAMMABLE LIQUID, N.O.S.  
(Isopropanol)
- Class : 3
- Packing group : III
- Marine pollutant : no

### SECTION 15. REGULATORY INFORMATION

#### 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** : Fire Hazard  
Acute Health Hazard

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

- 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.

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

**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) :**

On the inventory, or in compliance with the inventory

**New Zealand. Inventory of Chemical Substances :**

On the inventory, or in compliance with the inventory

**Japan. ENCS - Existing and New Chemical Substances Inventory :**

On the inventory, or in compliance with the inventory

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

not determined

**Korea. Korean Existing Chemicals Inventory (KECI) :**

On the inventory, or in compliance with the inventory

**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**

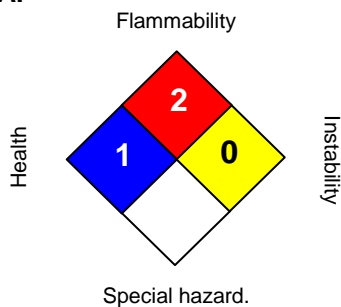
On the inventory, or in compliance with the inventory

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

On the inventory, or in compliance with the inventory

## SECTION 16. OTHER INFORMATION

**NFPA:**



**HMIS III:**

|                        |          |
|------------------------|----------|
| <b>HEALTH</b>          | <b>1</b> |
| <b>FLAMMABILITY</b>    | <b>2</b> |
| <b>PHYSICAL HAZARD</b> | <b>0</b> |

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

Issuing date : 03/14/2016  
Version : 1.1  
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



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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.