

**ECOTEMP ULTRA KLENE****SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : ECOTEMP ULTRA KLENE  
 Other means of identification : Not applicable  
 Recommended use : Machine Warewashing Detergent  
 Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.08 % - 0.11 %

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 : 02/12/2015

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

Skin corrosion : Category 1A  
 Serious eye damage : Category 1

**Product AT USE DILUTION**

Not a hazardous substance or mixture.

**GHS Label element****Product AS SOLD**

Hazard pictograms



Signal Word : Danger  
 Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**  
 Wash skin thoroughly after handling. Wear protective gloves/protective clothing/ eye protection/ face protection.  
**Response:**  
 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 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.

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

**Product AT USE DILUTION**

Precautionary Statements : **Prevention:**  
 Wash hands thoroughly after handling.  
**Response:**  
 Get medical advice/ attention if you feel unwell.  
**Storage:**  
 Store in accordance with local regulations.

Other hazards : None known.

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

Product AS SOLD : Mixture  
 Pure substance/mixture :  
 Chemical Name : sodium hydroxide  
 CAS-No. : 1310-73-2  
 Concentration (%) : 10 - 30

**Product AT USE DILUTION**

No hazardous ingredients

**SECTION 4. FIRST AID MEASURES****Product AS SOLD**

In case of eye contact

In case of skin contact

If swallowed

If inhaled

Protection of first-aiders

Notes to physician

Most important symptoms and effects, both acute and delayed

**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.

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## ECOTEMP ULTRA KLENE

If inhaled

Get medical attention if symptoms occur.

### 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 : 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 : 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 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 : Refer to protective measures listed in sections 7 and 8.
- 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.

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## ECOTEMP ULTRA KLENE

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 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. **SAFETY REMINDER:**  
\* Never pour product into unlabeled containers  
\* Use only for recommended uses. Read label.  
\* Never take product home. Use only in workplace.
- Conditions for safe storage : Do not store near acids. Keep out of reach of children. 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 : 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

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
sodium hydroxide	1310-73-2	Ceiling	2 mg/m <sup>3</sup>	ACGIH
		Ceiling	2 mg/m <sup>3</sup>	NIOSH REL
		TWA	2 mg/m <sup>3</sup>	OSHA Z1

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

#### Personal protective equipment

- Eye protection : Wear eye protection/ face protection.
- 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

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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.

Respiratory protection : No personal respiratory protective equipment normally required.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Product AS SOLD**

Appearance : liquid  
Color : clear, dark red  
Odor : odorless  
pH : 13.5, 100 %  
Flash point : Not applicable  
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 : 1.25  
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

**Product AT USE DILUTION**

liquid  
light pink  
odorless  
10.6 - 11.3

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**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 : 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 : 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

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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**  
 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

**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 daphnia and other aquatic invertebrates : sodium hydroxide 48 h EC50: 40 mg/l

**Persistence and degradability**

No data available  
**Bioaccumulative potential**  
 No data available

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**Mobility in soil**  
 No data available  
**Other adverse effects**  
 No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Product AS SOLD**

**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 reuse empty containers. Dispose of in accordance with local, state, and federal regulations.  
**RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste**  
 : D002 (Corrosive)

**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****Product AS SOLD**

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 : 1824  
 Description of the goods : Sodium hydroxide solution  
 Class : 8  
 Packing group : II  
 Environmentally hazardous : no

**Sea transport (IMDG/IIMO)**

UN number : 1824  
 Description of the goods : SODIUM HYDROXIDE SOLUTION  
 Class : 8  
 Packing group : II  
 Marine pollutant : no

**Product AT USE DILUTION**

Not intended for transport.

**SECTION 15. REGULATORY INFORMATION****Product AS SOLD**

**EPCRA - Emergency Planning and Community Right-to-Know**

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**CERCLA Reportable Quantity**

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
sodium hydroxide	1310-73-2	1000	4364

**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** : 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.

**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)** :  
On the inventory, or in compliance with the inventory

**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

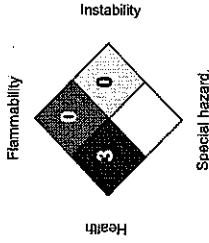
**SECTION 16. OTHER INFORMATION**

**Product AS SOLD**

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**NFPA:**



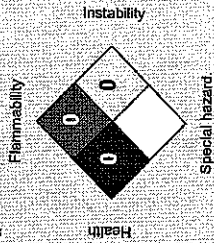
**HMIS III:**

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 : 02/12/2015  
Version : 1.2  
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.

