

# Material Safety Data Sheet

ECOTEMP ULTRA KLENE



## 1. Product and company identification

Trade name of product : ECOTEMP ULTRA KLENE  
Product use : Machine Warewashing Detergent

Product dilution information : Up to 1.4 oz/10 gal or 1 mL/L in water

Supplier's information : Ecolab Inc. Institutional Division  
370 N. Wabasha Street  
St. Paul, MN 55102  
1-800-352-5326

Code : 986216-02

Date of issue : 03-May-2012

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

## 2. Hazards identification

**Product AS SOLD**  
**Physical state** : Liquid.  
**Emergency overview** : DANGER !  
  
CAUSES DIGESTIVE TRACT, EYE AND SKIN BURNS.  
CAUSES RESPIRATORY TRACT IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.  
  
Do not ingest. Do not get in eyes, on skin or on clothing. Avoid breathing vapors, spray or mists. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

### Product AT USE DILUTION

Liquid.  
CAUTION !  
  
No specific hazard.  
  
No specific hazard.

### Potential acute health effects

**Product AS SOLD**  
**Eyes** : Corrosive to eyes.  
**Skin** : Corrosive to the skin.  
**Inhalation** : Severely irritating to the respiratory system.  
**Ingestion** : Causes burns to mouth, throat and stomach. May be harmful if swallowed.

### Product AT USE DILUTION

No known significant effects or critical hazards.  
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No known significant effects or critical hazards.  
No known significant effects or critical hazards.

See toxicological information (Section 11)

## 3. Composition/information on ingredients

### Product AS SOLD

Name	CAS number	% by weight
SODIUM HYDROXIDE	1310-73-2	23

### Product AT USE DILUTION

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

## 4. First aid measures

Product AS SOLD		Product AT USE DILUTION
<b>Eye contact</b>	: 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.	No known effect after eye contact. Rinse with water for a few minutes.
<b>Skin contact</b>	: 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.	No known effect after skin contact. Rinse with water for a few minutes.
<b>Inhalation</b>	: If inhaled, remove to fresh air. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention.	No special measures required. Treat symptomatically.
<b>Ingestion</b>	: 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.	Get medical attention if symptoms occur.

## 5. Fire-fighting measures

### Product AS SOLD

<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides metal oxide/oxides
<b>Fire-fighting media and instructions</b>	: Use an extinguishing agent suitable for the surrounding fire.  Dike area of fire to prevent runoff. In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Special protective equipment for fire-fighters</b>	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

Product AS SOLD		Product AT USE DILUTION
<b>Personal precautions</b>	: Initiate company's spill response procedures immediately. Keep people out of area. Put on appropriate personal protective equipment (see section 8). Do not touch or walk through spilled material.	Use personal protective equipment as required.
<b>Environmental precautions</b>	: Avoid contact of spilled material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
<b>Methods for cleaning up</b>	: Follow company's spill procedures. Keep people away from spill. Put on appropriate personal protective equipment (see section 8). Absorb/neutralize liquid material. Use a tool to scoop up solid or absorbed material and put into appropriate labeled container. Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

## 7. Handling and storage

<b>Handling</b>	<b>Product AS SOLD</b>
	: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or spray. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Storage</b>	<b>Product AS SOLD</b>
	: Keep out of reach of children. Store in a closed container. Keep container tightly closed. Do not store above the following temperature: 50°C

**Product AT USE DILUTION**  
Wash thoroughly after handling.

Keep out of reach of children.

## 8. Exposure controls/personal protection

<b>Engineering measures</b>	<b>Product AS SOLD</b>
	: 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. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.
<b>Personal protection</b>	
<b>Eyes</b>	: Use chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
<b>Hands</b>	: Use chemical-resistant, impervious gloves.
<b>Skin</b>	: Use synthetic apron, other protective equipment as necessary to prevent skin contact.
<b>Respiratory</b>	: Wear appropriate respirator when ventilation is inadequate and occupational exposure limits are exceeded.

**Product AT USE DILUTION**  
Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

No protective equipment is needed under normal use conditions.

No protective equipment is needed under normal use conditions.

No protective equipment is needed under normal use conditions.

No special protection is required.

Ingredient	Exposure limits
SODIUM HYDROXIDE	<b>ACGIH TLV (United States, 2/2010).</b> C: 2 mg/m <sup>3</sup> <b>OSHA PEL (United States, 6/2010).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s).

## 9. Physical and chemical properties

<b>Physical state</b>	<b>Product AS SOLD</b>
	: Liquid.
<b>Flash point</b>	<b>Product AS SOLD</b>
	: > 100°C Product does not support combustion.
<b>Color</b>	: Red [Dark]
<b>Odor</b>	: Odorless
<b>pH</b>	: 13.5 [Conc. (% w/w): 100%]
<b>Relative density</b>	: 1.25
<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.

**Product AT USE DILUTION**  
Liquid.  
> 100°C

pink [Light]  
Odorless  
10.6 to 11.3

## 10. Stability and reactivity

### Product AS SOLD

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
- Reactivity** : Highly 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.

## 11. Toxicological information

### Potential acute health effects

- Product AS SOLD**
- Eyes** : Corrosive to eyes.
- Skin** : Corrosive to the skin.
- Inhalation** : Severely irritating to the respiratory system.
- Ingestion** : Causes burns to mouth, throat and stomach. May be harmful if swallowed.

### Product AT USE DILUTION

No known significant effects or critical hazards.

### Product AS SOLD

### Other adverse effects

- Target organs** : Contains material which may cause damage to the following organs: upper respiratory tract.

## 12. Ecological information

- Ecotoxicity** : Not reported

## 13. Disposal considerations

- Product AS SOLD**
- Waste disposal** : Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.
- RCRA classification** : Unused product is D002 (Corrosive)

### Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

## 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.

### Product AS SOLD

#### DOT

- DOT Classification** UN1824
- DOT Proper shipping name** Sodium hydroxide solution
- Class** 8

- Packing group** II

#### IMO/IMDG

- IMO/IMDG Classification** UN1824
- IMO/IMDG Proper shipping name** SODIUM HYDROXIDE SOLUTION

## 14. Transport information

Class : 8  
 Packing group : II

For transport in bulk, see shipping documents for specific transportation information.

**Product AT USE DILUTION**  
 Not intended for transport.

## 15. Regulatory information

**Product AS SOLD**

HCS : Corrosive material  
 Classification : Target organ effects

**Product AS SOLD**

U.S. Federal regulations

TSCA 8(b) inventory : All components are listed or exempted.  
 SARA 302/304/311/312 extremely hazardous substances: No listed substance  
 SARA 302/304 emergency planning and notification: No listed substance

SARA 313 Product name CAS number Concentration

Form R - Reporting requirements : No listed substance

California Prop. 65 : No listed substance

**Product AT USE DILUTION**

Not regulated.

## 16. Other information

**Product AS SOLD**

Hazardous Material Information System (U.S.A.) :

Health	3
Flammability	0
Physical hazards	0

National Fire Protection Association (U.S.A.) :



**Product AT USE DILUTION**

Health	0
Flammability	0
Physical hazards	0



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 1-800-352-5326

Indicates information that has changed from previously issued version.

Notice to reader

## 16. Other information

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.**