

# Material Safety Data Sheet



KEYSTONE LIQUID BLEACH CLEANER

## 1. Product and company identification

Trade name of product : KEYSTONE LIQUID BLEACH CLEANER  
Product use : Surface cleaner

Product dilution information : Not applicable

Supplier's information : Ecolab Co.  
5105 Tomken Road  
Mississauga ON L4W 2X5  
1-800-352-5326

Code : 912485-01

Date of issue : 19-December-2013

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 : WARNING !

CAUSES EYE AND SKIN IRRITATION.  
Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion

### Potential acute health effects

#### Product AS SOLD

Eyes : Severely irritating to eyes.  
Skin : Irritating to skin.  
Inhalation : No known significant effects or critical hazards.  
Ingestion : No known significant effects or critical hazards.

See toxicological information (Section 11)

### Product AT USE DILUTION

Product is sold ready to use.

### Product AT USE DILUTION

Product is sold ready to use.

## 3. Composition/information on ingredients

### Product AS SOLD

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
sodium hypochlorite	7681-52-9	1 - 5
1-octanesulfonic acid, sodium salt	5324-84-5	1 - 5

### Product AT USE DILUTION

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
Product is sold ready to use.		

## 4. First-aid measures

	Product AS SOLD
<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.
<b>Skin contact</b>	: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Inhalation</b>	: No special measures required. Treat symptomatically.
<b>Ingestion</b>	: Get medical attention if symptoms occur.

**Product AT USE DILUTION**  
Product is sold ready to use.

## 5. Fire-fighting measures

### Product AS SOLD

<b>Auto-ignition temperature</b>	: Not available.
<b>Flammable limits</b>	: Not available.
<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides
<b>Special remarks on fire hazards</b>	: Not available.
<b>Special remarks on explosion hazards</b>	: Not available.
<b>Fire-fighting media and instructions</b>	: Use an extinguishing agent suitable for the surrounding fire.  Dyke 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
<b>Personal precautions</b>	: Use personal protective equipment as required.
<b>Environmental precautions</b>	: Avoid contact of large amounts of spilt material and runoff with soil and surface waterways.
<b>Methods for cleaning up</b>	: Use a water rinse for final clean-up.

**Product AT USE DILUTION**  
Product is sold ready to use.

## 7. Handling and storage

	Product AS SOLD
<b>Handling</b>	: Avoid contact with eyes, skin and clothing. Mixing this product with acid or ammonia releases chlorine gas. Wash thoroughly after handling.
<b>Storage</b>	: Keep out of reach of children. Store in a closed container. Store between the following temperatures: 5 and 40°C

**Product AT USE DILUTION**  
Product is sold ready to use.

## 8. Exposure controls/personal protection

**Product AS SOLD**  
**Engineering measures** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protection

**Eyes** : Wear eye protection.  
**Hands** : For prolonged or repeated handling, use the following type of gloves: Impervious gloves.  
**Skin** : No protective equipment is needed under normal use conditions.  
**Respiratory** : No special protection is required.

### Product AT USE DILUTION

Product is sold ready to use.

Product is sold ready to use.

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			Notations
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	
chlorine	US ACGIH 3/2012	0.5	1.5	-	1	2.9	-	-	-	-	[3]
	AB 4/2009	0.5	1.5	-	1	2.9	-	-	-	-	
	BC 4/2012	0.5	-	-	1	-	-	-	-	-	
	ON 7/2010	0.5	1.5	-	1	2.9	-	-	-	-	
	QC 9/2011	0.5	1.5	-	1	2.9	-	-	-	-	
sodium hypochlorite	US AIHA 10/2011	-	-	-	-	2	-	-	-	-	

## 9. Physical and chemical properties

**Product AS SOLD**  
**Physical state** : Liquid.  
**Flash point** : > 100°C  
**Colour** : Amber  
**Odour** : citrus  
**pH** : 12.8 [Conc. (% w/w): 100%]  
**Boiling/condensation point** : 100°C (212°F)  
**Melting/freezing point** : Not available.  
**Relative density** : 1.047  
**Vapour pressure** : Not available.  
**Vapour density** : Not available.  
**Odour threshold** : Not available.  
**Evaporation rate** : Not available.  
**Viscosity** : Kinematic (room temperature): 0 cm<sup>2</sup>/s (0 cSt)  
**Dispersibility properties** : Not available.  
**Solubility** : Not available.  
**LogK<sub>ow</sub>** : Not available.

### Product AT USE DILUTION

Product is sold ready to use.

## 10. Stability and reactivity

### Product AS SOLD

**Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.  
**Conditions of instability** : Not available.  
**Reactivity** : Extremely reactive or incompatible with the following materials: acids. Mixing this product with acid or ammonia releases chlorine gas.

## 10. Stability and reactivity

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerisation** : Under normal conditions of storage and use, hazardous polymerisation will not occur.

## 11. Toxicological information

### Potential acute health effects

#### Product AS SOLD

**Eyes** : Severely irritating to eyes.  
**Skin** : Irritating to skin.  
**Inhalation** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Product AT USE DILUTION

Product is sold ready to use.

#### Product AS SOLD

### Potential chronic health effects

**Carcinogenic effects** : No known significant effects or critical hazards.  
**Mutagenic effects** : No known significant effects or critical hazards.  
**Teratogenic effects** : No known significant effects or critical hazards.  
**Reproductive effects** : No known significant effects or critical hazards.  
**Sensitization to Product** : No known significant effects or critical hazards.  
**Synergistic products (toxicologically)** : Not available.

### Toxicity data

Product/ingredient name	Test	Route	Result	Species
1-octanesulfonic acid, sodium salt	LD50	Oral	>5000 mg/kg	Rat
sodium hypochlorite	LD50	Dermal	>10000 mg/kg	Rabbit
	LD50	Oral	5230 mg/kg	Rat

### Other adverse effects

**Target organs** : Not available.

## 12. Ecological information

**Ecotoxicity** : Not reported

## 13. Disposal considerations

#### Product AS SOLD

**Waste disposal** : Diluted product can be flushed to sanitary sewer.  
 Discard empty container in trash.

#### Product AT USE DILUTION

Product is sold ready to use.

## 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

### TDG

**TDG Classification** : Not regulated.

### IMO/IMDG

**IMO/IMDG Classification** : Not regulated.

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

## 15. Regulatory information

**Product AS SOLD**

**Product AT USE DILUTION**

**WHMIS** : Class D-2B: Material causing other toxic effects (Toxic).

Product is sold ready to use.

**Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## 16. Other information

**Product AS SOLD**

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

Health	2
Flammability	0
Physical hazards	0

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



**Date of issue** : 19-December-2013

**Responsible name** : Regulatory Affairs  
1-800-352-5326

☑ Indicates information that has changed from previously issued version.

**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.