

# SAFETY DATA SHEET

**ECOLAB®**

QUORUM GREEN

## Section 1. Chemical product and company identification

**Product name** : QUORUM GREEN  
**Recommended use and restrictions** : Sanitizer.  
Use only for the purpose on the product label.

**Product dilution information** : Not applicable

**Supplier's information** : Ecolab Inc. Food & Beverage Division  
370 N. Wabasha Street  
St. Paul, MN 55102  
1-800-392-3392

**Code** : 986364-02

**Date of issue** : 08 Jan 2014

**EPA Registration No.** : 1677-144

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

## Section 2. Hazards identification

### Product AS SOLD

**GHS Classification** : ACUTE TOXICITY: ORAL - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

### GHS label elements

**Signal word** : Warning

**Symbol** :



**Hazard statements** : Harmful if swallowed.  
Causes skin and eye irritation.

### Precautionary statements

**Prevention** : Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.

**Response** : IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. 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 attention.

**Storage** :

### Product AT USE DILUTION

Data not available - Refer to Product AS SOLD

## Section 2. Hazards identification

No other specific measures identified.	
<b>Disposal</b>	: See section 13 for waste disposal information.
<b>Other hazards</b>	: None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture	
<b>Product AS SOLD</b>		
<b>Hazardous ingredients</b>	<b>Concentration Range (%)</b>	<b>CAS number</b>
sodium hypochlorite		
SODIUM HYDROXIDE	5.25 <1	7681-52-9 1310-73-2
<b>Product AT USE DILUTION</b>		
<b>Hazardous ingredients</b>	<b>Concentration Range (%)</b>	<b>CAS number</b>
Data not available - Refer to Product AS SOLD		

## Section 4. First aid measures

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Eye contact</b>	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.	Data not available - Refer to Product AS SOLD
<b>Skin contact</b>	: Take off contaminated clothing. Wash with plenty of soap and water. 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 you feel unwell. Rinse mouth.	
<b>Protection of first-aiders</b>	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.	
<b>Notes to physician</b>	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	

See toxicological information (section 11)

## Section 5. Fire-fighting measures

<b>Product AS SOLD</b>	
<b>Suitable fire extinguishing media</b>	: Use water spray, fog or foam.
<b>Specific hazards arising from the chemical</b>	: In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous thermal decomposition products</b>	: Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
<b>Specific fire-fighting methods</b>	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

## Section 5. Fire-fighting measures

**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

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Personal precautions</b>	: Use personal protective equipment as required.	Data not available - Refer to Product AS SOLD
<b>Environmental precautions</b>	: Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.	
<b>Methods for cleaning up</b>	: Use a water rinse for final clean-up.	

## Section 7. Handling and storage

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Handling</b>	: Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Mixing this product with acid or ammonia releases chlorine gas. Use only with adequate ventilation. Wash thoroughly after handling.	Data not available - Refer to Product AS SOLD
<b>Storage</b>	: Keep out of reach of children. Keep container tightly closed.	

Store between the following temperatures: -10 and 40°C

## Section 8. Exposure controls/personal protection

### Control parameters

Ingredient name	Exposure limits
sodium hypochlorite	<b>AIHA WEEL (United States, 10/2011).</b> STEL: 2 mg/m <sup>3</sup> 15 minutes. <b>ACGIH TLV (United States, 3/2012).</b> C: 2 mg/m <sup>3</sup> <b>OSHA PEL (United States, 6/2010).</b> TWA: 2 mg/m <sup>3</sup> 8 hours. <b>NIOSH REL (United States, 6/2009).</b> CEIL: 2 mg/m <sup>3</sup>
SODIUM HYDROXIDE	<b>ACGIH TLV (United States, 3/2012).</b> STEL: 2.9 mg/m <sup>3</sup> 15 minutes. STEL: 1 ppm 15 minutes. TWA: 1.5 mg/m <sup>3</sup> 8 hours. TWA: 0.5 ppm 8 hours. <b>OSHA PEL (United States, 6/2010).</b> CEIL: 3 mg/m <sup>3</sup> CEIL: 1 ppm
chlorine	<b>NIOSH REL (United States, 6/2009).</b> CEIL: 0.5 ppm 15 minutes. CEIL: 1.45 mg/m <sup>3</sup> 15 minutes.

## Section 8. Exposure controls/personal protection

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Appropriate engineering controls</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.	Data not available - Refer to Product AS SOLD
<b>Personal protection</b>		
<b>Eye protection</b>	: No protective equipment is needed under normal use conditions.	
<b>Hand protection</b>	: No protective equipment is needed under normal use conditions.	
<b>Skin protection</b>	: No protective equipment is needed under normal use conditions.	
<b>Respiratory protection</b>	: A respirator is not needed under normal and intended conditions of product use.	
<b>Hygiene measures</b>	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.	

## Section 9. Physical and chemical properties

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Physical state</b>	: Liquid.	Data not available - Refer to Product AS SOLD
<b>Color</b>	: Yellowish [Light]	
<b>Odor</b>	: chlorine	
<b>pH</b>	: 12.4 to 13.2 (100%)	
<b>Flash point</b>	: > 100°C Product does not support combustion.	
<b>Explosion limits</b>	: Not available.	
<b>Flammability (solid, gas)</b>	: Not available.	
<b>Melting point</b>	: Not available.	
<b>Boiling point</b>	: >100°C (>212°F)	
<b>Evaporation rate (butyl acetate = 1)</b>	: Not available.	
<b>Vapor pressure</b>	: Not available.	
<b>Vapor density</b>	: Not available.	
<b>Relative density</b>	: 1.092 (Water = 1)	
<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.	
<b>Partition coefficient: n-octanol/water</b>	: Not available.	
<b>Auto-ignition temperature</b>	: Not available.	
<b>Decomposition temperature</b>	: Not available.	
<b>Odor threshold</b>	: Not available.	

## Section 9. Physical and chemical properties

**Viscosity** : Kinematic (room temperature): 0 cm<sup>2</sup>/s (0 cSt)

## Section 10. Stability and reactivity

### Product AS SOLD

**Stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Materials to avoid** : Slightly reactive or incompatible with the following materials: metals and acids. Mixing this product with acid or ammonia releases chlorine gas.

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

## Section 11. Toxicological information

**Route of exposure** : Skin contact, Eye contact, Inhalation, Ingestion

### Product AS SOLD

#### Symptoms

**Eye contact** : Adverse symptoms may include the following:  
irritation  
watering  
redness

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Inhalation** : No specific data.

**Ingestion** : No specific data.

#### Acute toxicity

**Eye contact** : Causes eye irritation.

**Skin contact** : Causes skin irritation.

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : Harmful if swallowed.

### Product AT USE DILUTION

Data not available - Refer to Product AS SOLD

#### Toxicity data

##### Product/ingredient name

sodium hypochlorite	LD50 Dermal	Rabbit	>10000 mg/kg
	LD50 Oral	Rat	5230 mg/kg

#### Chronic toxicity

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

### Product AS SOLD

**Ecotoxicity** : This material is very toxic to aquatic life.

#### Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
Not available.			
Other adverse effects	: No known significant effects or critical hazards.		

## Section 13. Disposal considerations

	<b>Product AS SOLD</b>	<b>Product AT USE DILUTION</b>
<b>Disposal methods</b>	: 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.	Data not available - Refer to Product AS SOLD
<b>RCRA classification</b>	: Unused product is D002 (Corrosive)	

## 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.

#### DOT

<b>DOT Classification</b>	UN1791
<b>DOT Proper shipping name</b>	Hypochlorite solutions
<b>Class</b>	8
<b>Packing group</b>	III

#### IMO/IMDG

<b>IMO/IMDG Classification</b>	UN1791
<b>IMO/IMDG Proper shipping name</b>	HYPOCHLORITE SOLUTION.
<b>Class</b>	8
<b>Packing group</b>	III

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

### Product AT USE DILUTION

Not intended for transport.

## Section 15. Regulatory information

### Product AS SOLD

#### U.S. Federal regulations

<b>TSCA 8(b) inventory</b>	: All components are listed or exempted.
<b>EPA Registration No.</b>	: 1677-144
<b>SARA 302/304/311/312 extremely hazardous substances</b>	: No listed substance
<b>SARA 302/304 emergency planning and notification</b>	: No listed substance

<u>SARA 313</u>	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
<b>Form R - Reporting requirements</b>	: No listed substance		
<b>California Prop. 65</b>	: No listed substance		

## Section 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 : 08 Jan 2014

Prepared by : Regulatory Affairs  
1-800-352-5326

### 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.