

# KAY<sup>®</sup> PROGRAM – HOW TO READ A GHS SDS



# OVERVIEW

## Safety First

- Our regulatory processes are based on rigorous, globally-accepted scientific metrics to assess human health and environmental impacts
- Ecolab never compromises on safety and our programs are designed to meet or exceed regulations globally
- We integrate product safety considerations into product design, transport, use and disposal in order to support the development and marketing of innovative products that are safe for people and the environment when used as intended



Every day, we help make the world cleaner, safer and healthier.

# UNDERSTANDING GHS AND CLP

- GHS (Globally Harmonized System of Classification and Labeling of Chemicals) was developed under a 1992 international mandate of the United Nations and is designed to “harmonize,” or make consistent, the way chemical hazards are communicated around the world
- OSHA is the enforcing body for the United States
- The CLP Regulation (for "Classification, Labelling and Packaging") is an EU regulation dating to 2008, which aligns the European Union system of classification, labelling and packaging of chemical substances and mixtures to GHS
- GHS and CLP regulations apply to Ecolab as a manufacturer and our customers as users of products containing chemicals



# SAFETY DATA SHEETS (SDS)

- The term “Material Safety Data Sheet (MSDS)” is no longer used
- GHS requires a 16-section standardized format
- All products follow this format (previously, manufacturers could choose the format)
- Ecolab SDSs are available at:  
[www.ecolab.com/sds](http://www.ecolab.com/sds)
  - US – available in English / Spanish / French

KAY SAFETY DATA SHEET	
QSR HEAVY DUTY MULTI-PURPOSE SINK DETERGENT	
<b>SECTION 1. PRODUCT AND COMPANY IDENTIFICATION</b>	
Product name	: QSR HEAVY DUTY MULTI-PURPOSE SINK DETERGENT
Other means of identification	: Not applicable
Recommended use	: Manual Warewashing Detergent
Restrictions on use	: Reserved for industrial and professional use.
Product dilution information	: 0.2 %
Company	: Kay Chemical Company 8300 Capital Drive Greensboro, North Carolina USA 27409 1-800-529-5458
Emergency health information	: 1-877-231-2615 (USA/Canada), 952-853-1713 (outside USA)
Issuing date	: 05/16/2019
<b>SECTION 2. HAZARDS IDENTIFICATION</b>	
<b>GHS Classification</b>	
Product AS SOLD Eye irritation	: Category 2B
<b>Product AT USE DILUTION</b> Not a hazardous substance or mixture.	
<b>GHS label elements</b>	
Product AS SOLD Signal Word	: Warning
Hazard Statements	: Causes eye irritation.
Precautionary Statements	: <b>Prevention:</b> Wash skin thoroughly after handling. <b>Response:</b> 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.
Product AT USE DILUTION Precautionary Statements	: <b>Prevention:</b> Wash hands thoroughly after handling. <b>Response:</b> Get medical advice/ attention if you feel unwell. <b>Storage:</b> Store in accordance with local regulations.
Product AS SOLD Other hazards	: None known.
<b>SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS</b>	
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# SDS REQUIREMENTS

1. Identification
2. **Hazards Identification**
3. Composition Information
4. **First-Aid Measures**
5. Fire-Fighting Measures
6. Accidental Release Measures
7. Handling and Storage
8. **Exposure Controls / Personal Protection**
9. Physical and Chemical Properties
10. Stability and Reactivity
11. Toxicological Information
12. Ecological Information
13. Disposal Considerations
14. Transport Information
15. Regulatory Information
16. Other Information

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# SECTION 1: IDENTIFICATION

- Links SDS to product label
- Provides general product use and manufacturer information
- Identifies sources for more information
- Required to have Product Name, Company, and Emergency Info

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	RETAIL MULTI SURFACE & GLASS CLEANER WITH PEROXIDE
Other means of identification	:	Not applicable
Recommended use	:	Glass Cleaner
Product dilution information	:	3.0 %
Company	:	Kay Chemical Company 8300 Capital Drive Greensboro, North Carolina USA 27409 1-800-529-5458
Emergency health information	:	1-877-231-2615 (USA/Canada), 952-853-1713 (outside USA)
Issuing date	:	06/14/2016

# SECTION 2: HAZARDS IDENTIFICATION

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Product AS SOLD  
Eye irritation : Category 2A

### Product AT USE DILUTION

Not a hazardous substance or mixture.

### GHS label elements

Product AS SOLD  
Hazard pictograms :



Signal Word : Warning

Hazard Statements : Causes serious eye irritation.

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

### 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.

Section 2 describes the product hazard and includes many of the same elements as the label – Signal Words, Pictograms, Hazard Statements, and Precautionary Statements.

## Section: 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Category 1A H314  
Serious eye damage, Category 1 H318  
The classification of this product is based only on its extreme pH value (in accordance with current European legislation).

#### Classification (67/548/EEC, 1999/45/EC)

C; CORROSIVE R35  
The classification of this product is based only on its extreme pH value (in accordance with current European legislation).

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H314 Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**  
P280 Wear protective gloves/ eye protection/ face protection.  
**Response:**  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.

SDS for Ecolab-branded products will continue to describe hazards both “As Sold” and “At Use Dilution”. This is an added, non-GHS required feature.

# SECTION 3: COMPOSITION

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Product AS SOLD

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
d-glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	1 - 5
Hydrogen peroxide	7722-84-1	1 - 5
d-glucopyranose, oligomeric, c10-16-alkyl glycosides	110615-47-9	1 - 5

### Product AT USE DILUTION

No hazardous ingredients

- Identifies hazardous chemicals as defined by country requirements, including CAS numbers and percentages



# SECTION 4: FIRST-AID MEASURES

## Section: 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### Product AS SOLD

- 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.

Concentrate

#### 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.
- If inhaled : Get medical attention if symptoms occur.

Use

Section 4 includes important instructions should you be exposed to the product.

### 4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

### 4.3 Indication of immediate medical attention and special treatment needed

Treatment : No specific measures identified.

# SECTION 5: FIRE FIGHTING

- Provides basic fire-fighting guidance

## SECTION 5. FIRE-FIGHTING MEASURES

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 (NO <sub>x</sub> ) 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

Describes adverse effects of an accidental spill, leak, or release of product, and actions to be taken to minimize exposure

## 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

: 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.

# SECTION 7: STORAGE AND HOLDING

## 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. Do not mix with bleach or other chlorinated products – will cause chlorine gas.
- Conditions for safe storage : Keep in a cool, well-ventilated place. Keep away from reducing agents. Keep away from strong bases. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
- Storage temperature : 15 °C to 40 °C

### Product AT USE DILUTION

- Advice on safe handling : Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling.
- Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

- ▲ Describes appropriate practices for safe handling and storage of product



# SECTION 8: EXPOSURE CONTROLS PPE

## Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Product AS SOLD Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Product AS SOLD Appropriate engineering controls

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

#### Individual protection measures

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 and body in case of contact or splash hazard.

**Eye / face protection:** Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

**Hand protection:** Chemical-resistant protective gloves (EN 374).

Breakthrough time: 1 – 4 hours  
Consult PPE manufacturer for the appropriate glove thickness (depending on the type of gloves and its intended use).  
Gloves should be discarded and replaced if there is any indication.

**Body protection:** Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.

143, 14387) technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, 89/686/EEC), or equivalent, with filter type:P

#### Product AT USE DILUTION Appropriate engineering controls

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

#### Individual protection measures

Hygiene measures : Wash hands before breaks and immediately after handling the product.

Eye/face protection (EN 166) : No special protective equipment required.

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection (EN 14605) : No special protective equipment required.

Respiratory protection (EN 143, 14387) : None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements (89/656/EEC, 89/686/EEC), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

#### Environmental exposure controls

General advice : Consider the provision of containment around storage vessels.



# SECTION 9: CHEMICAL AND PHYSICAL PROPERTIES

- Lists physical data, including color, odor, and pH, that can be used to characterize the product and design safe work practices

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: clear, yellow	yellow
Odor	: Perfumes, fragrances	Perfumes, fragrances
pH	: 0.5 - 1.5, 100 %	2.0 - 2.5
Flash point	: Not applicable, Does not sustain combustion.	
Odor Threshold	: No data available	
Melting point/freezing point	: No data available	
Initial boiling point and boiling range	: > 100 °C	
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	: 1.033 - 1.041	
Water solubility	: soluble	

# SECTION 10: STABILITY

## SECTION 10. STABILITY AND REACTIVITY

### Product AS SOLD

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: None known.
Incompatible materials	: Bases Metals
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NO <sub>x</sub> )

- ▲ Provides a determination of the intrinsic stability of the product
- ▲ Describes conditions or materials that can affect the hazards of the product

# SECTION 11: TOXICOLOGY

- Describes health hazards, if any, identified for the product or product ingredients

## SECTION 11. TOXICOLOGICAL INFORMATION

### Experience with human exposure

#### Product AS SOLD

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Irritation, Corrosion, Allergic reactions
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough

#### Product AT USE DILUTION

Eye contact	: Redness, Irritation
Skin contact	: Redness, Irritation, Allergic reactions
Ingestion	: No symptoms known or expected.
Inhalation	: No symptoms known or expected.

### Toxicity

#### Product AS SOLD

Acute oral toxicity	: LD50 1,500 mg/kg
Acute inhalation toxicity	: 4 h Acute toxicity estimate : > 10 mg/l
Acute dermal toxicity	: LD50 : 1,500 mg/kg
Respiratory or skin sensitization	: May cause sensitization by skin contact.
Carcinogenicity	
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 INFO

- Provides ecotoxicity and environmental fate information, if available, on the product or product ingredients

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Environmental Effects : Toxic to aquatic life.

### 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 : octadecanoic acid, sodium salt  
96 h LC50 Fish: 7.44 mg/l

### Ingredients

Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate  
48 h EC50 Daphnia : 200 mg/l

sodium hydroxide  
48 h EC50: 40 mg/l

# SECTION 13: DISPOSAL

- Provides information useful in determining appropriate disposal measures for the product

These are the only disposal instructions we are able to give

## 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 re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

RCRA - Resource Conservation and Recovery 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

- Provides basic shipping classification information applicable for the country, **as a reference**
- It is NOT a transport document

## 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)

Not dangerous goods

### Sea transport (IMDG/IMO)

UN number	: 3077
Description of the goods	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Sodium dichloro-s-triazinetrione dihydrate)
Class	: 9
Packing group	: III
Marine pollutant	: yes

### Product AT USE DILUTION

Not intended for transport.

# SECTION 15: COUNTRY REGULATORY INFO

Provides information specific to country regulations on the product

## SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

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

\*: Calculated RQ exceeds reasonably attainable upper limit.

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

**SARA 313** : 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.

# SECTION 16: OTHER INFO

- Provides other information, including HMIS and NFPA ratings and a general disclaimer

**SECTION 16. OTHER INFORMATION**

**Product AS SOLD**  
NFPA:

Special hazard.

**HMIS III:**

<b>HEALTH</b>	<b>3*</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

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

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**Product AT USE DILUTION**  
NFPA:

Special hazard.

**HMIS III:**

<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
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**ECOLAB<sup>®</sup>**